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May 2008

Northeast
National Petroleum Reserve-Alaska

FINAL Supplemental
Integrated Activity Plan/Environmental Impact Statement

Volume 6: Maps

Alaska

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The Bureau of Land Management Today

Our Vision

To enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources.

Our Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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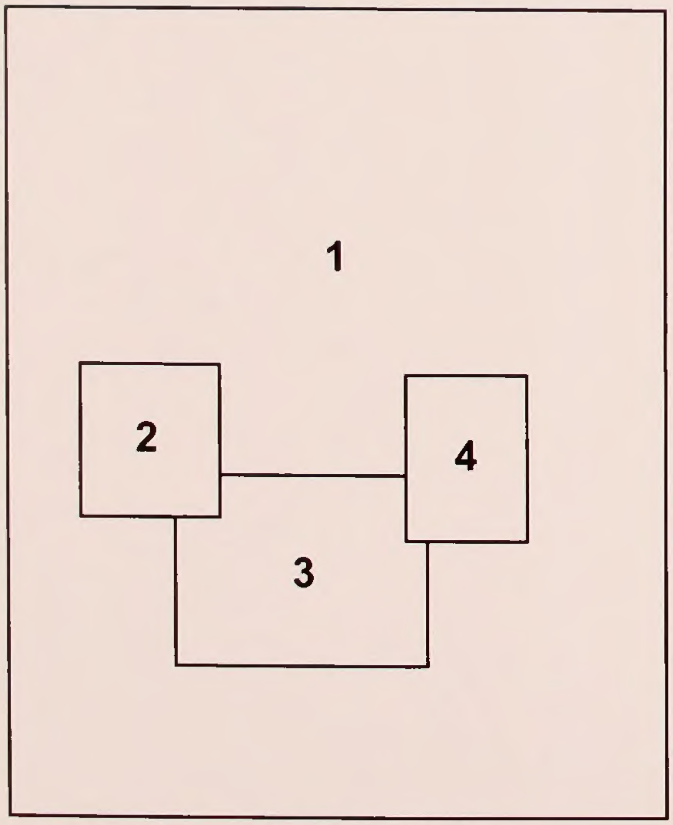

BLM Cover Photos:

1. Teshekpuk Lake, Alaska. Photo by Richard Kemnitz.
2. Caribou, northern Alaska.
3. Drilling Rig at Hunter A well in the Northeast National Petroleum Reserve-Alaska.
   Photo by BLM Branch of Energy
4. Canada Goose, northern Alaska.

Northeast National Petroleum Reserve–Alaska

FINAL

Supplemental Integrated Activity Plan/ Environmental Impact Statement

VOLUME 6: Maps

Prepared by

U.S. Department of Interior
Bureau of Land Management
Anchorage, Alaska

In Cooperation with the North Slope Borough

May 2008

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Chapter 2 – Alternatives
Chapter 3 – Affected Environment

VOLUME 2
Chapter 4 – Environmental Consequences (sections 4.1 – 4.6)

VOLUME 3
Chapter 4 – Environmental Consequences (continued: sections 4.7 – 4.12)

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Chapter 5 – Consultation and Coordination
Chapter 6 – Comments and Responses

VOLUME 5
Appendices, Bibliography, Glossary, and List of Acronyms

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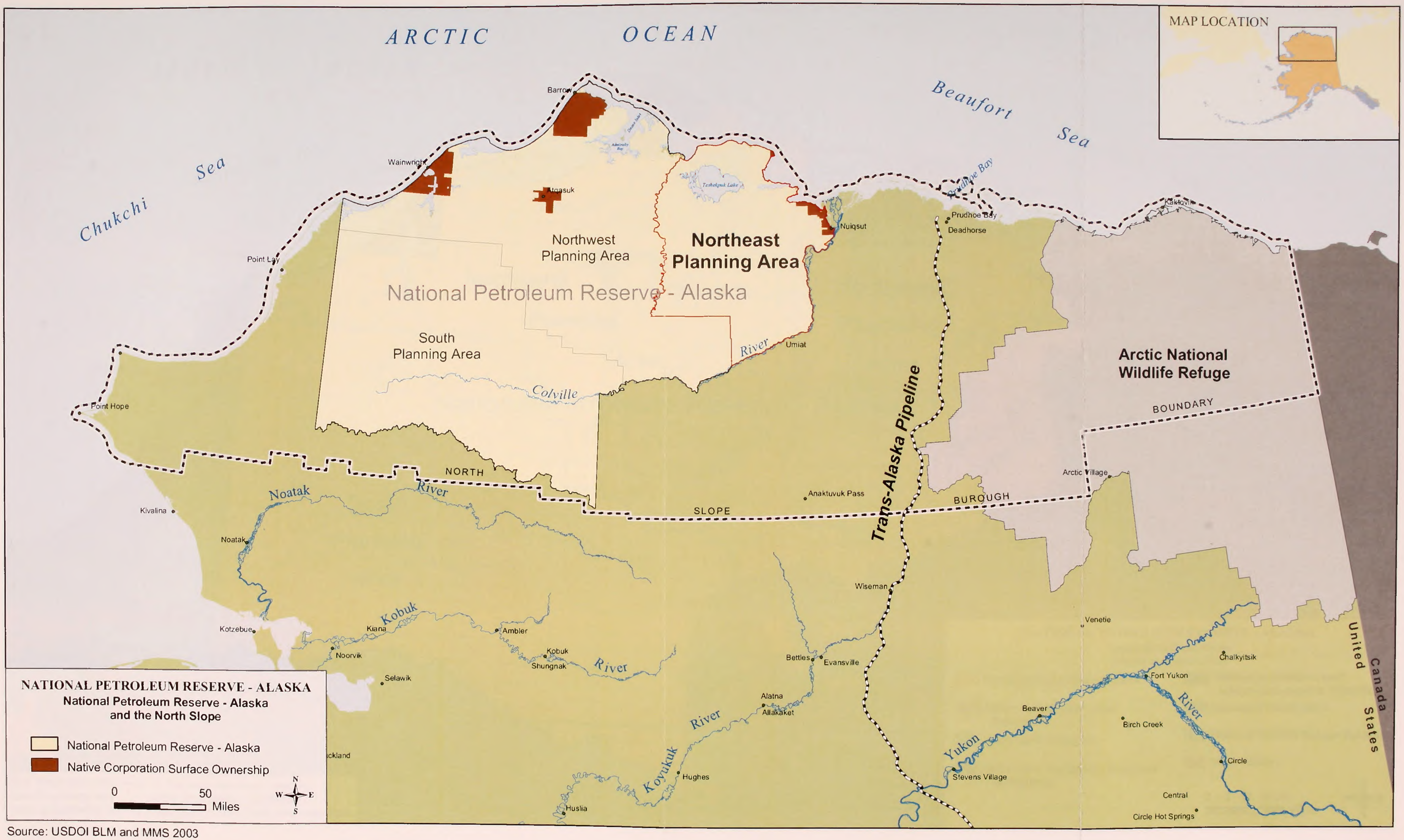
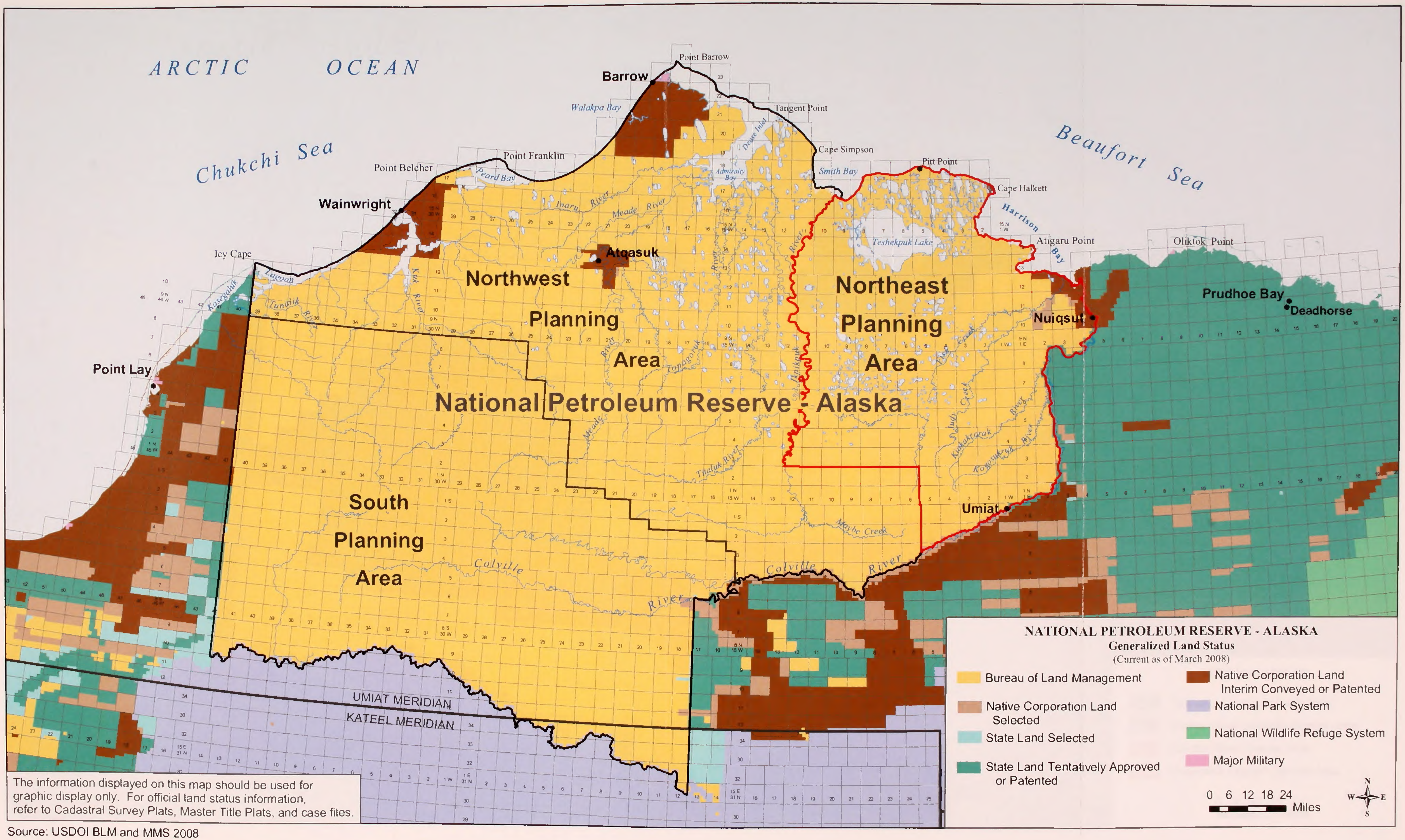


Source: USDOI BLM and MMS 2003

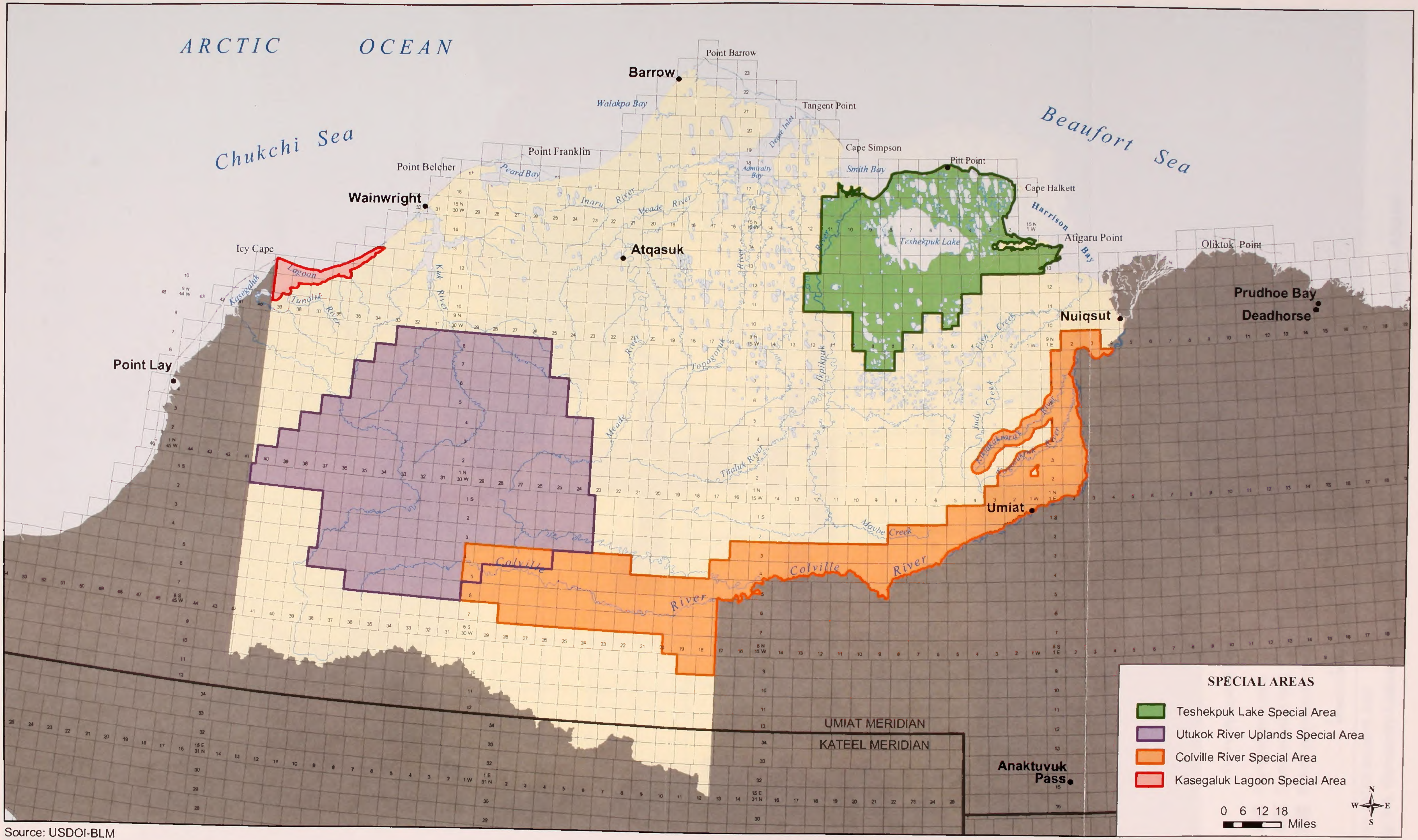
Map 1-1. National Petroleum Reserve-Alaska and the North Slope



The information displayed on this map should be used for graphic display only. For official land status information, refer to Cadastral Survey Plats, Master Title Plats, and case files.

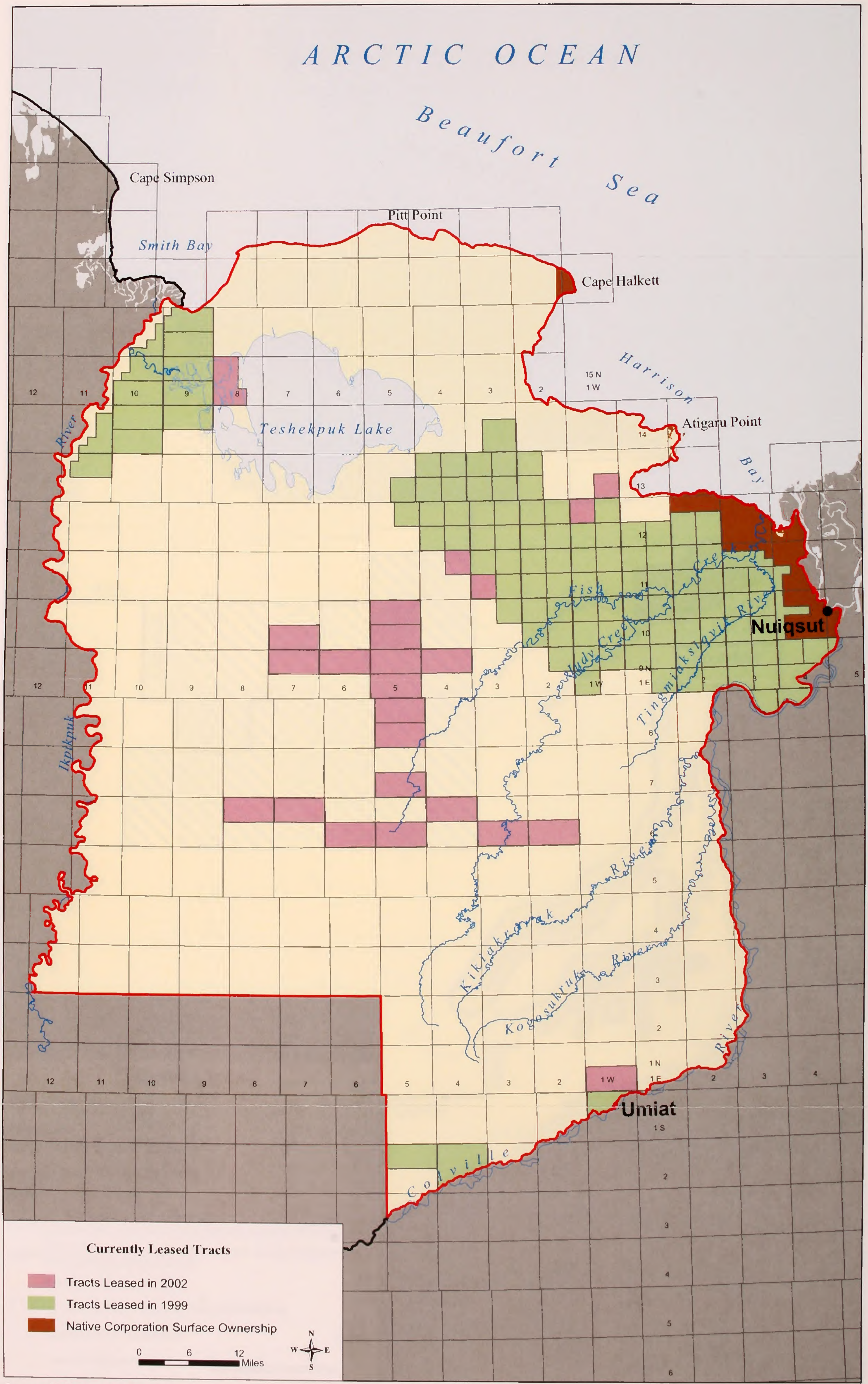
Source: USDOI BLM and MMS 2008

Map 1-2. Generalized Land Status in the National Petroleum Reserve-Alaska



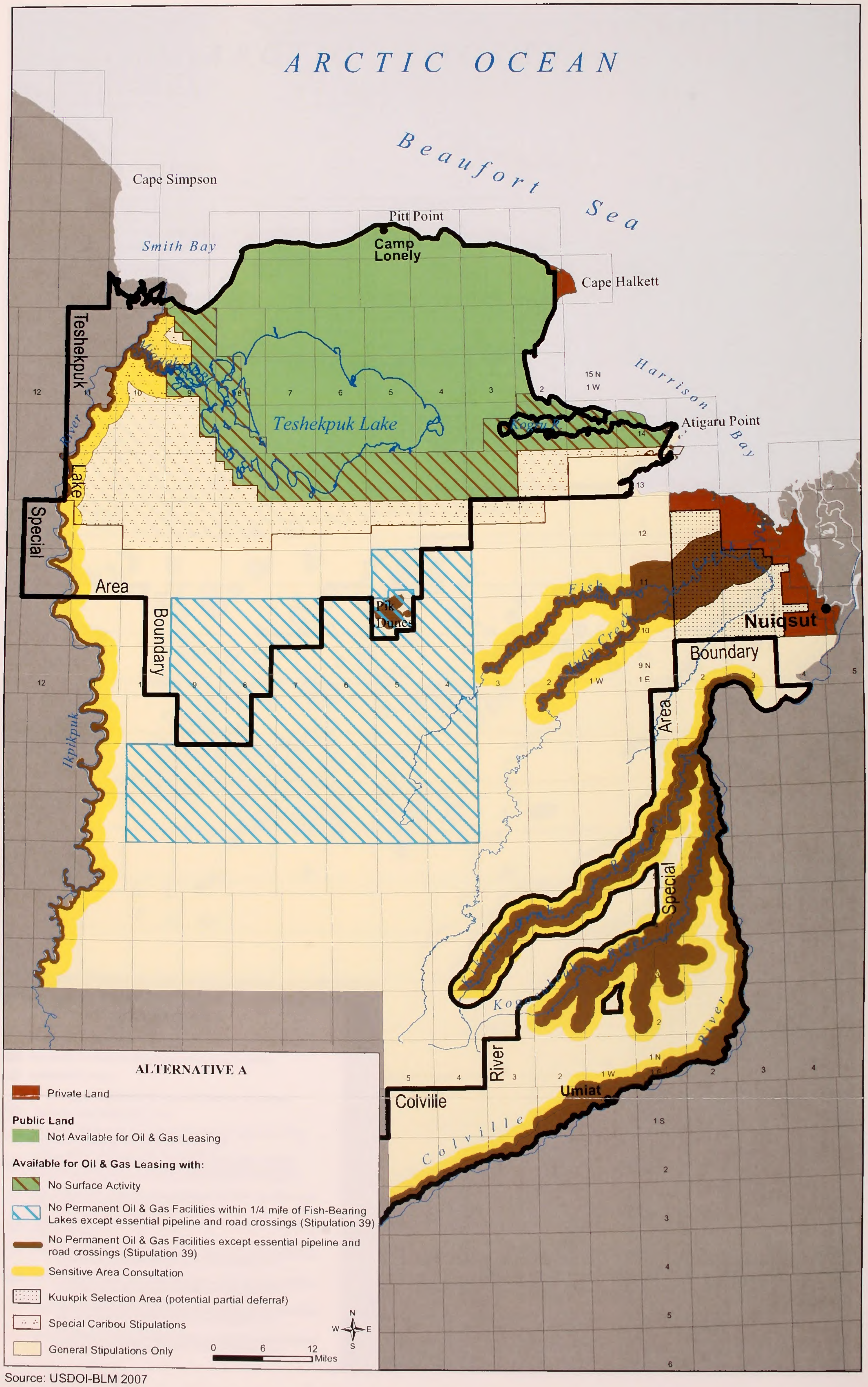
Source: USDOI-BLM

Map 1-3. Special Areas within the National Petroleum Reserve-Alaska



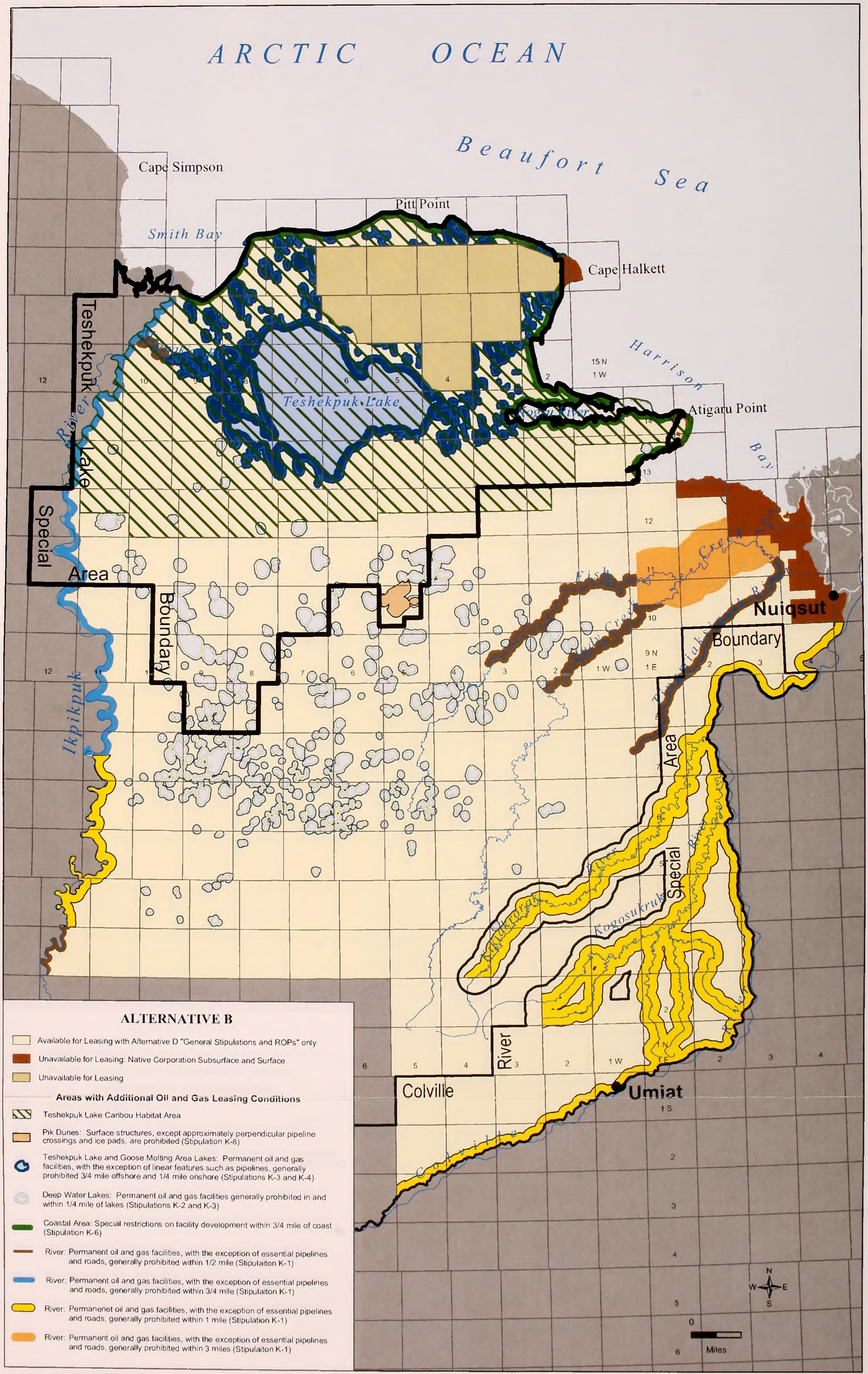
Source: USDOI and MMS 2003

Map 1-4. Currently Leased Tracts in the Northeast National Petroleum Reserve-Alaska


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Camp Lonely
Cape Halkett
Harrison Bay
Atigaru Point
Teshekpuk Lake
Pik Dunes
Nuiqsut
Umiat
Fish Creek
Judy Creek
Ikpikpuk River
Colville River
Teshekpuk Lake Special Area Boundary
Colville River Special Area Boundary
15 N
1 W
9 N
1 E
1 N
1 S
ALTERNATIVE A
🟥 Private Land
Public Land
🟩 Not Available for Oil & Gas Leasing
Available for Oil & Gas Leasing with:
▨ No Surface Activity
▨ No Permanent Oil & Gas Facilities within 1/4 mile of Fish-Bearing Lakes except essential pipeline and road crossings (Stipulation 39)
No Permanent Oil & Gas Facilities except essential pipeline and road crossings (Stipulation 39)
Sensitive Area Consultation
Kuukpik Selection Area (potential partial deferral)
Special Caribou Stipulations
General Stipulations Only
0
6
12
Miles
N
W
E
S

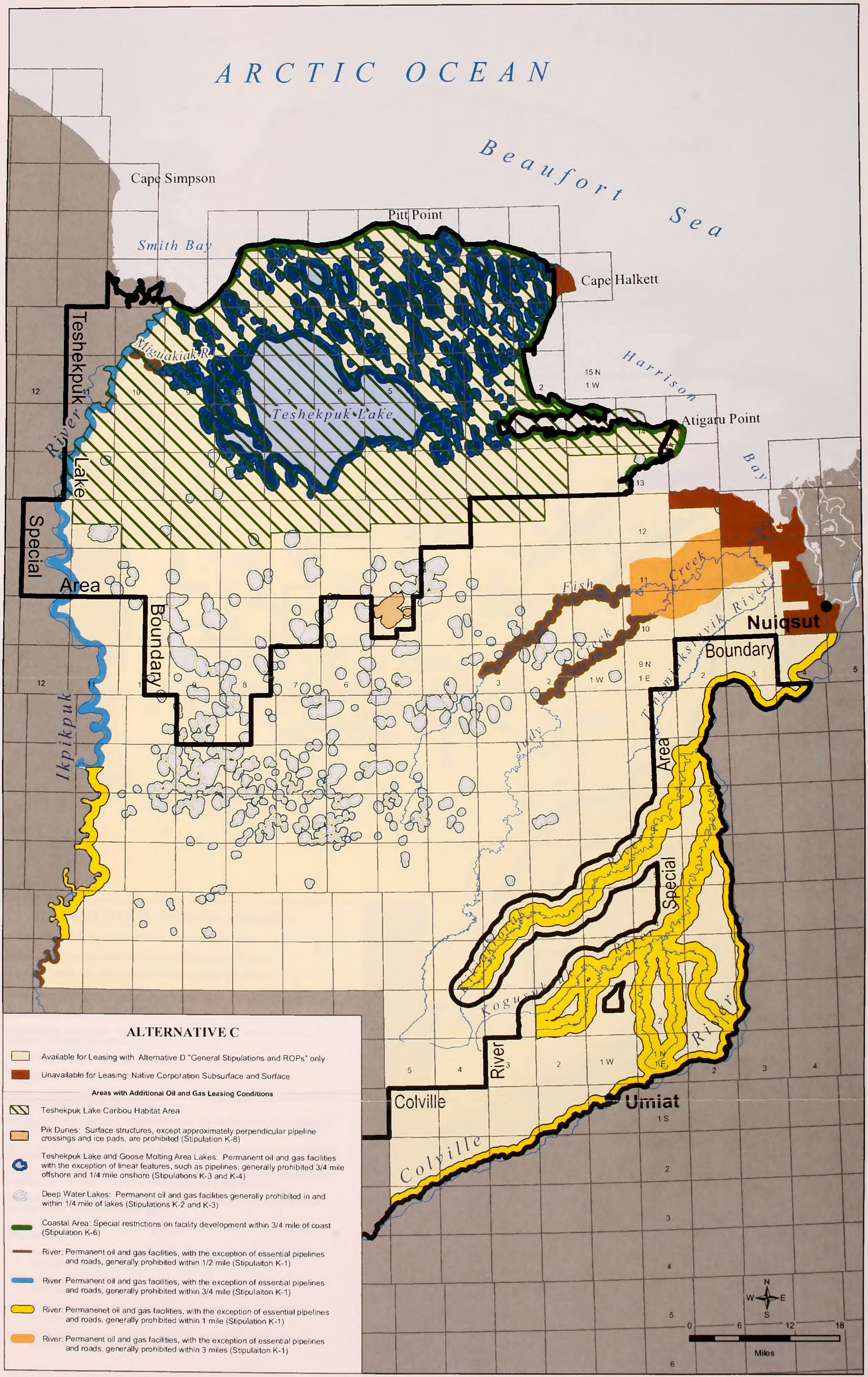
Source: USDOI-BLM 2007

Map 2-1. Northeast National Petroleum Reserve-Alaska Alternative A (No Action Alternative)


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
Teshekpuk Lake
Teshekpuk Lake Special Area Boundary
Ikpikpuk River
Fish Creek
Judy Creek
Nuiqsut
Umiat
Colville River Special Area Boundary
Kogosukruk River
Colville
15 N
1 W
9 N
1 E
1 S
ALTERNATIVE B
Available for Leasing with Alternative D "General Stipulations and ROPs" only
Unavailable for Leasing: Native Corporation Subsurface and Surface
Unavailable for Leasing
Areas with Additional Oil and Gas Leasing Conditions
Teshekpuk Lake Caribou Habitat Area
Pik Dunes: Surface structures, except approximately perpendicular pipeline crossings and ice pads, are prohibited (Stipulation K-8)
Teshekpuk Lake and Goose Molting Area Lakes: Permanent oil and gas facilities, with the exception of linear features such as pipelines, generally prohibited 3/4 mile offshore and 1/4 mile onshore (Stipulations K-3 and K-4)
Deep Water Lakes: Permanent oil and gas facilities generally prohibited in and within 1/4 mile of lakes (Stipulations K-2 and K-3)
Coastal Area: Special restrictions on facility development within 3/4 mile of coast (Stipulation K-6)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 1/2 mile (Stipulaiton K-1)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 3/4 mile (Stipulaiton K-1)
River: Permanenet oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 1 mile (Stipulation K-1)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 3 miles (Stipulaiton K-1)
N
W
E
S
0
Miles

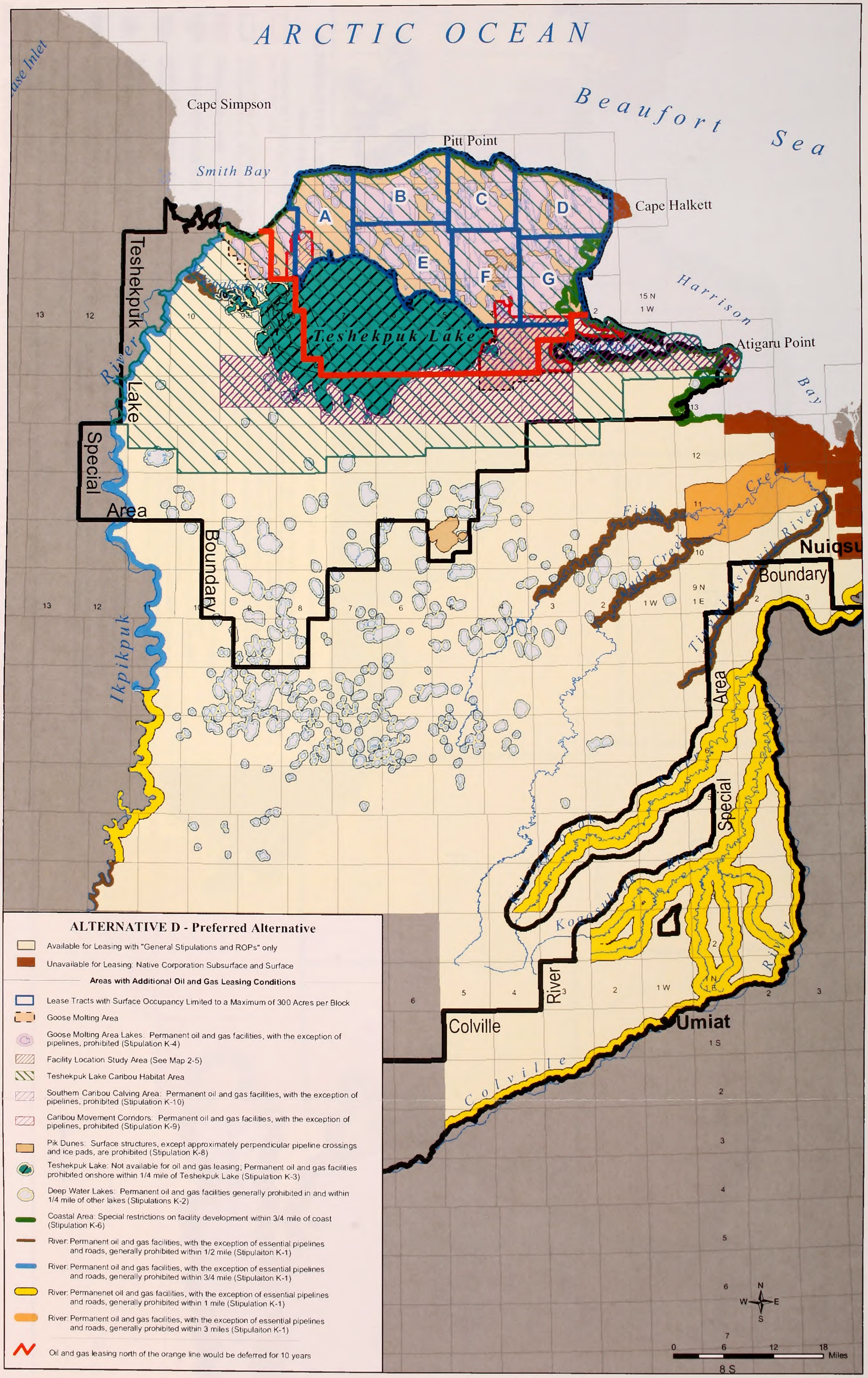
Source: USDOI-BLM 2007

Map 2-2. Northeast National Petroleum Reserve-Alaska Alternative B


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
15 N
1 W
Teshekpuk Lake
Miguakiak R.
Teshekpuk Lake Special Area Boundary
Ikpikpuk River
Fish Creek
Judy Creek
Tinmiaksiavik River
Nuiqsut
Colville River Special Area Boundary
Kogusukluk River
Colville
Umiat
9 N
1 E
1 W
1 N
1 E
1 S
ALTERNATIVE C
Available for Leasing with Alternative D "General Stipulations and ROPs" only
Unavailable for Leasing: Native Corporation Subsurface and Surface
Areas with Additional Oil and Gas Leasing Conditions
Teshekpuk Lake Caribou Habitat Area
Pik Dunes: Surface structures, except approximately perpendicular pipeline crossings and ice pads, are prohibited (Stipulation K-8)
Teshekpuk Lake and Goose Molting Area Lakes: Permanent oil and gas facilities with the exception of linear features, such as pipelines, generally prohibited 3/4 mile offshore and 1/4 mile onshore (Stipulations K-3 and K-4)
Deep Water Lakes: Permanent oil and gas facilities generally prohibited in and within 1/4 mile of lakes (Stipulations K-2 and K-3)
Coastal Area: Special restrictions on facility development within 3/4 mile of coast (Stipulation K-6)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 1/2 mile (Stipulaiton K-1)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 3/4 mile (Stipulaiton K-1)
River: Permanenet oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 1 mile (Stipulation K-1)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 3 miles (Stipulaiton K-1)
N
W
E
S
0
6
12
18
Miles

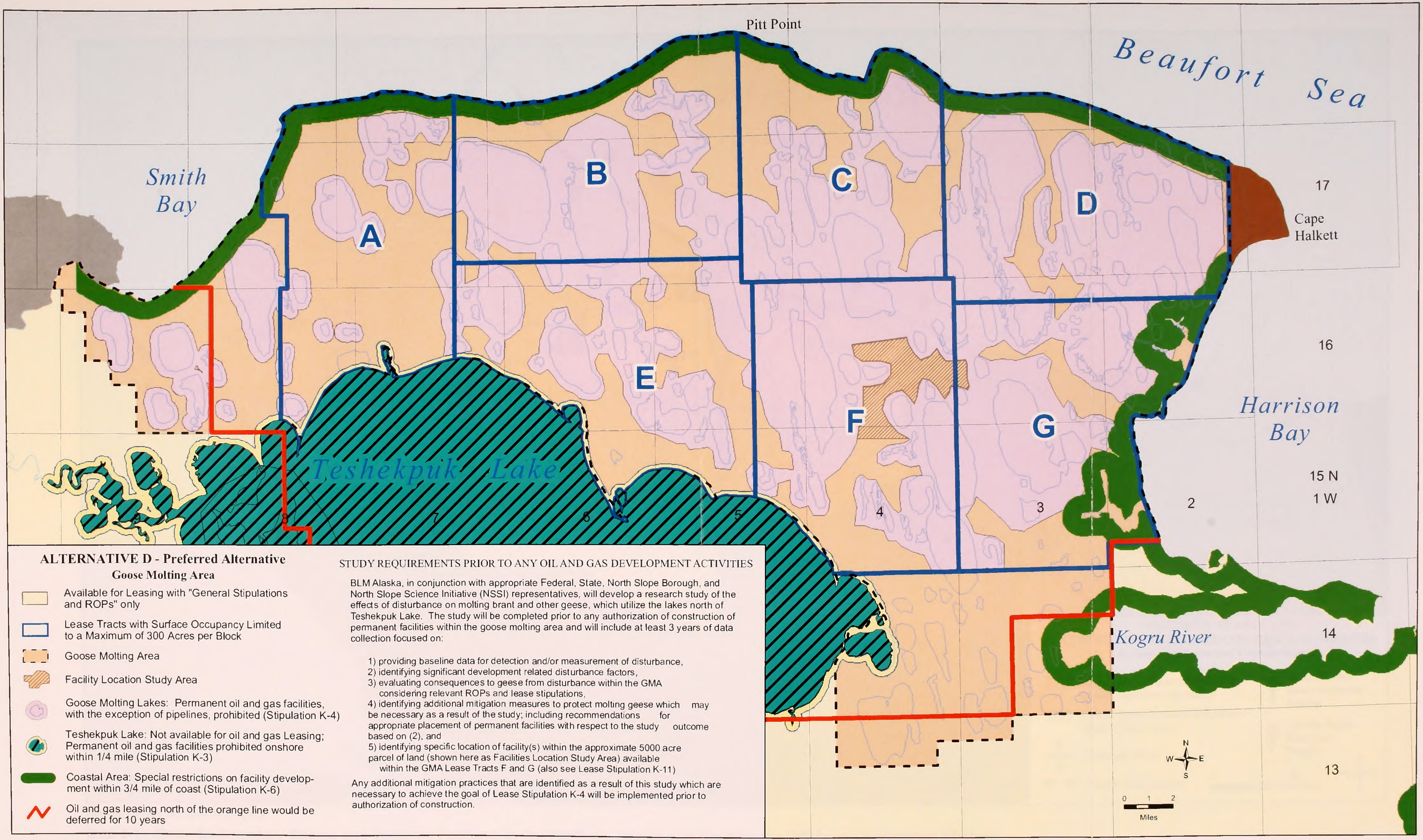
Source: USDOI-BLM 2007

Map 2-3. Northeast National Petroleum Reserve-Alaska Alternative C


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Pitt Point
Smith Bay
Cape Halkett
Harrison Bay
Atigaru Point
Teshekpuk Lake
A
B
C
D
E
F
G
Teshekpuk Lake Special Area Boundary
Nuiqsut
Umiat
Colville River
Ikpikpuk River
Fish Creek
Judy Creek
Tinmiaqsiugvik River
Kogosukruk River
ALTERNATIVE D - Preferred Alternative
Available for Leasing with "General Stipulations and ROPs" only
Unavailable for Leasing: Native Corporation Subsurface and Surface
Areas with Additional Oil and Gas Leasing Conditions
Lease Tracts with Surface Occupancy Limited to a Maximum of 300 Acres per Block
Goose Molting Area
Goose Molting Area Lakes: Permanent oil and gas facilities, with the exception of pipelines, prohibited (Stipulation K-4)
Facility Location Study Area (See Map 2-5)
Teshekpuk Lake Caribou Habitat Area
Southern Caribou Calving Area: Permanent oil and gas facilities, with the exception of pipelines, prohibited (Stipulation K-10)
Caribou Movement Corridors: Permanent oil and gas facilities, with the exception of pipelines, prohibited (Stipulation K-9)
Pik Dunes: Surface structures, except approximately perpendicular pipeline crossings and ice pads, are prohibited (Stipulation K-8)
Teshekpuk Lake: Not available for oil and gas leasing; Permanent oil and gas facilities prohibited onshore within 1/4 mile of Teshekpuk Lake (Stipulation K-3)
Deep Water Lakes: Permanent oil and gas facilities generally prohibited in and within 1/4 mile of other lakes (Stipulations K-2)
Coastal Area: Special restrictions on facility development within 3/4 mile of coast (Stipulation K-6)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 1/2 mile (Stipulaiton K-1)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 3/4 mile (Stipulaiton K-1)
River: Permanenet oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 1 mile (Stipulation K-1)
River: Permanent oil and gas facilities, with the exception of essential pipelines and roads, generally prohibited within 3 miles (Stipulaiton K-1)
Oil and gas leasing north of the orange line would be deferred for 10 years
0 6 12 18 Miles
N W E S

Source: USDOI-BLM, 2007

Map 2-4. Northeast National Petroleum Reserve-Alaska Alternative D - Preferred Alternative


Pitt Point
Beaufort Sea
Smith Bay
A
B
C
D
E
F
G
17
Cape Halkett
16
Harrison Bay
15 N
1 W
2
3
4
5
6
7
8
Teshekpuk Lake
Kogru River
14
13
N
W
E
S
0 1 2
Miles
ALTERNATIVE D - Preferred Alternative
Goose Molting Area
Available for Leasing with "General Stipulations and ROPs" only
Lease Tracts with Surface Occupancy Limited to a Maximum of 300 Acres per Block
Goose Molting Area
Facility Location Study Area
Goose Molting Lakes: Permanent oil and gas facilities, with the exception of pipelines, prohibited (Stipulation K-4)
Teshekpuk Lake: Not available for oil and gas Leasing; Permanent oil and gas facilities prohibited onshore within 1/4 mile (Stipulation K-3)
Coastal Area: Special restrictions on facility development within 3/4 mile of coast (Stipulation K-6)
Oil and gas leasing north of the orange line would be deferred for 10 years

STUDY REQUIREMENTS PRIOR TO ANY OIL AND GAS DEVELOPMENT ACTIVITIES

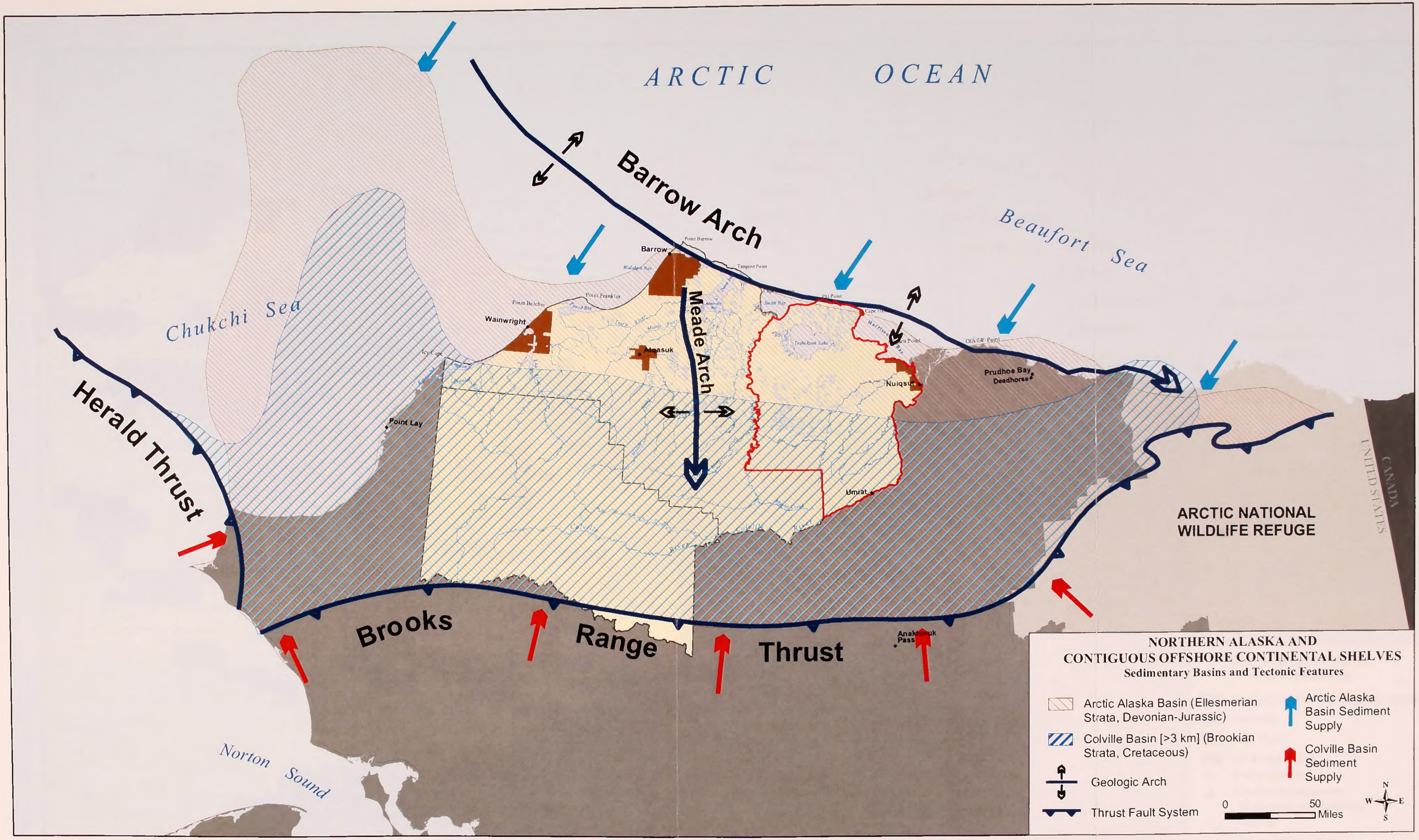
BLM Alaska, in conjunction with appropriate Federal, State, North Slope Borough, and North Slope Science Initiative (NSSI) representatives, will develop a research study of the effects of disturbance on molting brant and other geese, which utilize the lakes north of Teshekpuk Lake. The study will be completed prior to any authorization of construction of permanent facilities within the goose molting area and will include at least 3 years of data collection focused on:

1) providing baseline data for detection and/or measurement of disturbance,
2) identifying significant development related disturbance factors,
3) evaluating consequences to geese from disturbance within the GMA considering relevant ROPs and lease stipulations,
4) identifying additional mitigation measures to protect molting geese which may be necessary as a result of the study; including recommendations for appropriate placement of permanent facilities with respect to the study outcome based on (2), and
5) identifying specific location of facility(s) within the approximate 5000 acre parcel of land (shown here as Facilities Location Study Area) available within the GMA Lease Tracts F and G (also see Lease Stipulation K-11)

Any additional mitigation practices that are identified as a result of this study which are necessary to achieve the goal of Lease Stipulation K-4 will be implemented prior to authorization of construction.

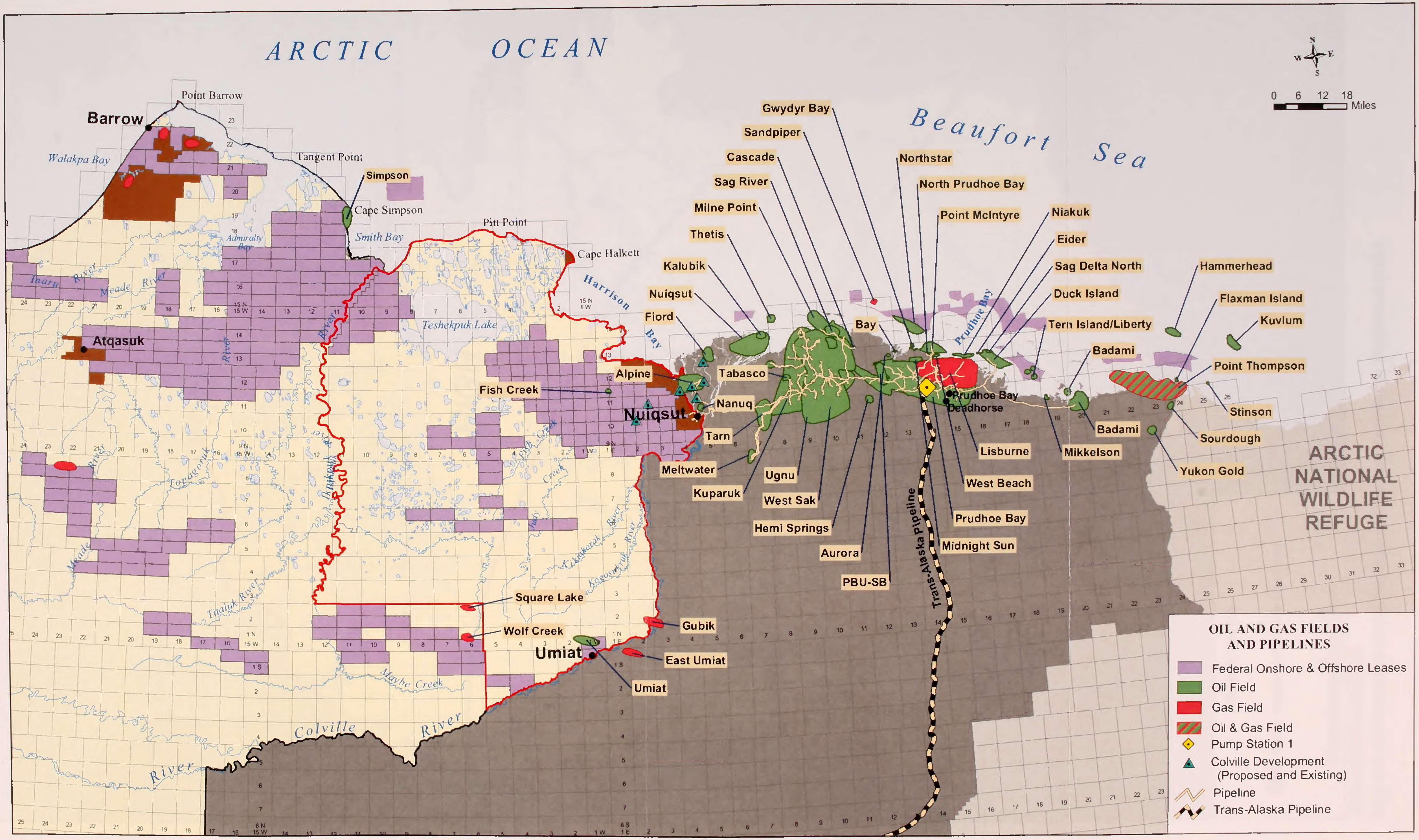
Source: USDOI-BLM, 2007

Map 2-5. Northeast National Petroleum Reserve-Alaska Alternative D - Preferred Alternative : Goose Molting Area



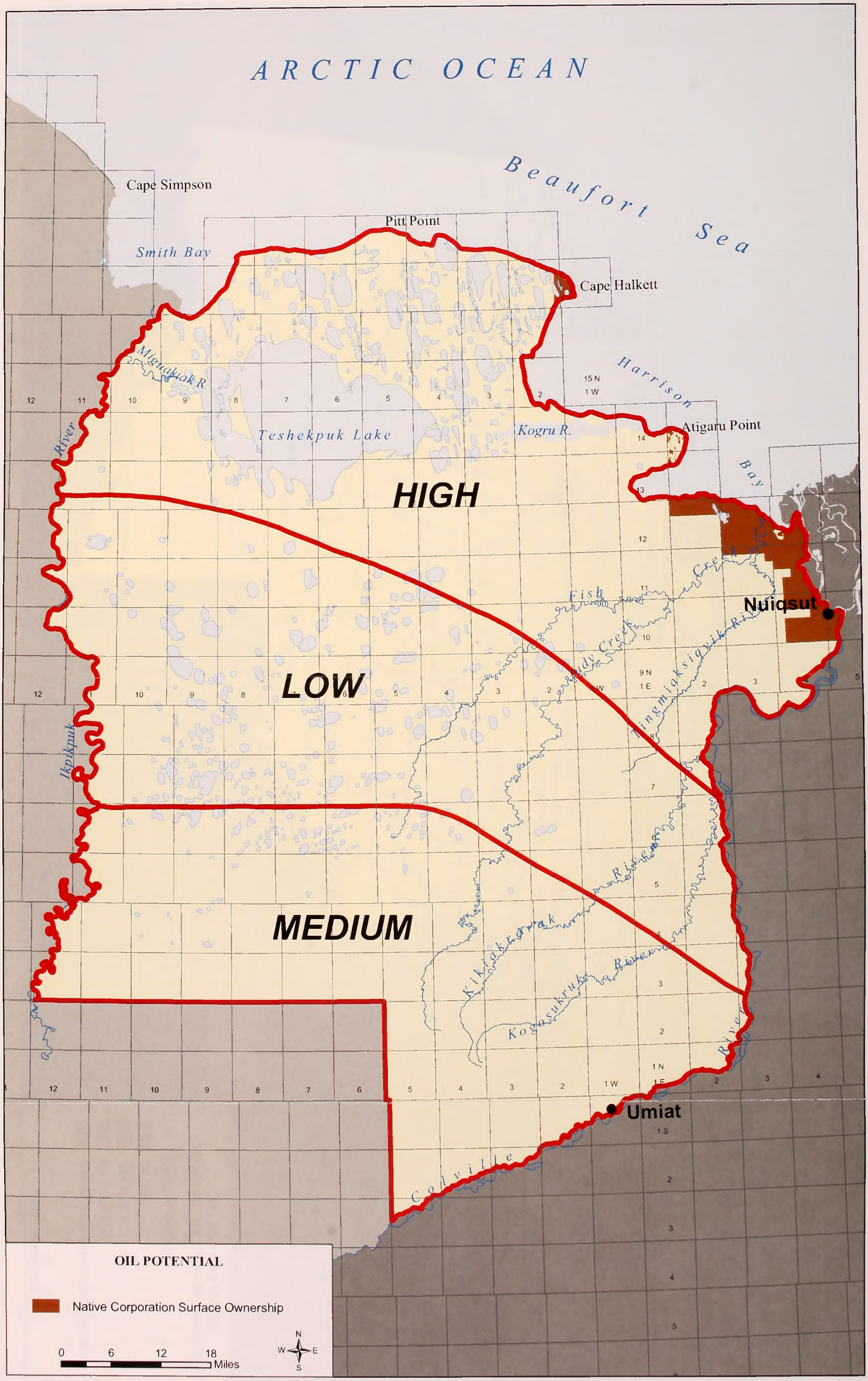
Source: USDOI BLM and MMS 2003

Map 3-1. Major Sedimentary Basins and Tectonic Features in the Northern Alaska and Contiguous Offshore Continental Shelves



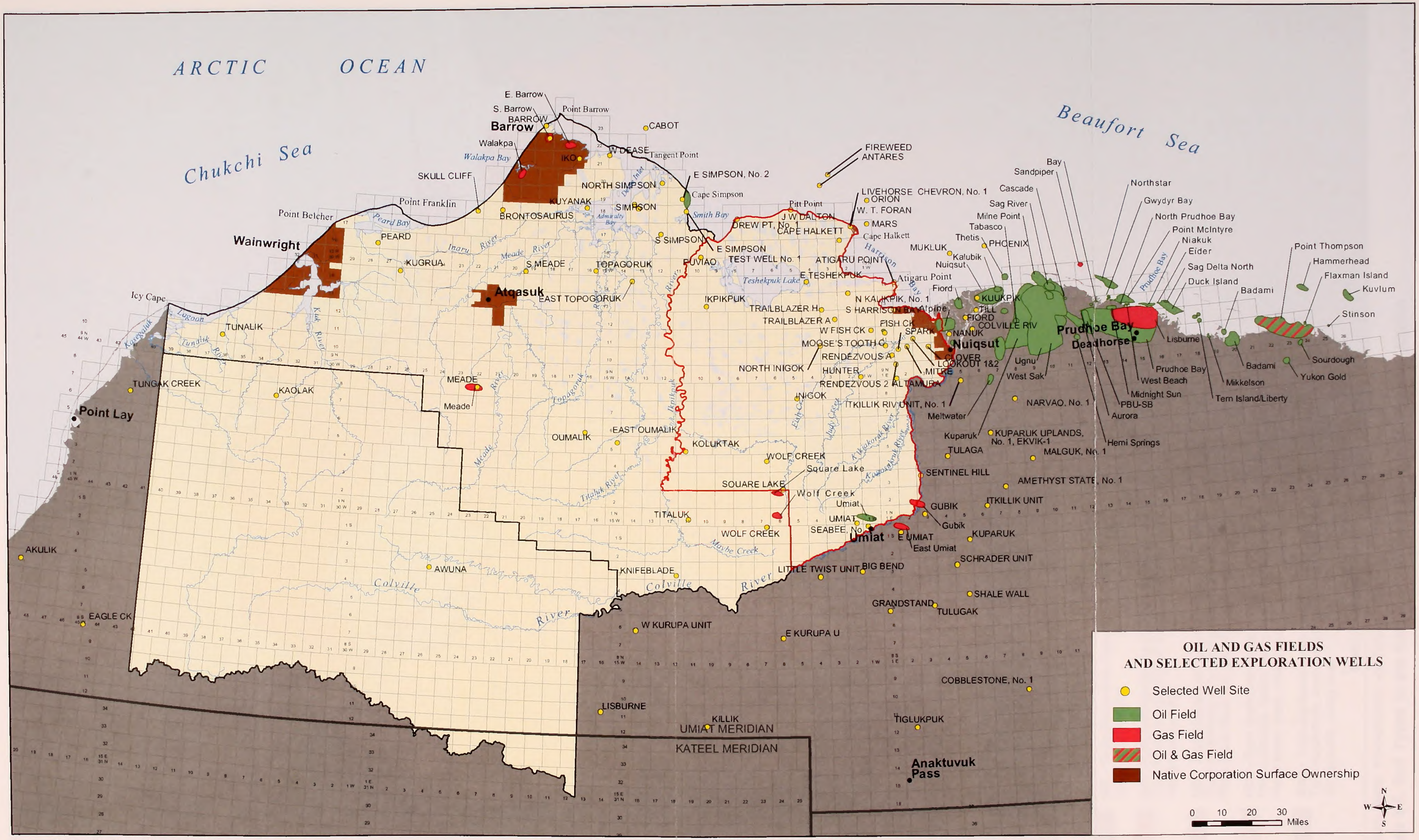
Source: USDOI BLM and MMS 2006

Map 3-2. North Slope and the National Petroleum Reserve - Alaska Oil and Gas Fields and Pipelines and Active Leases



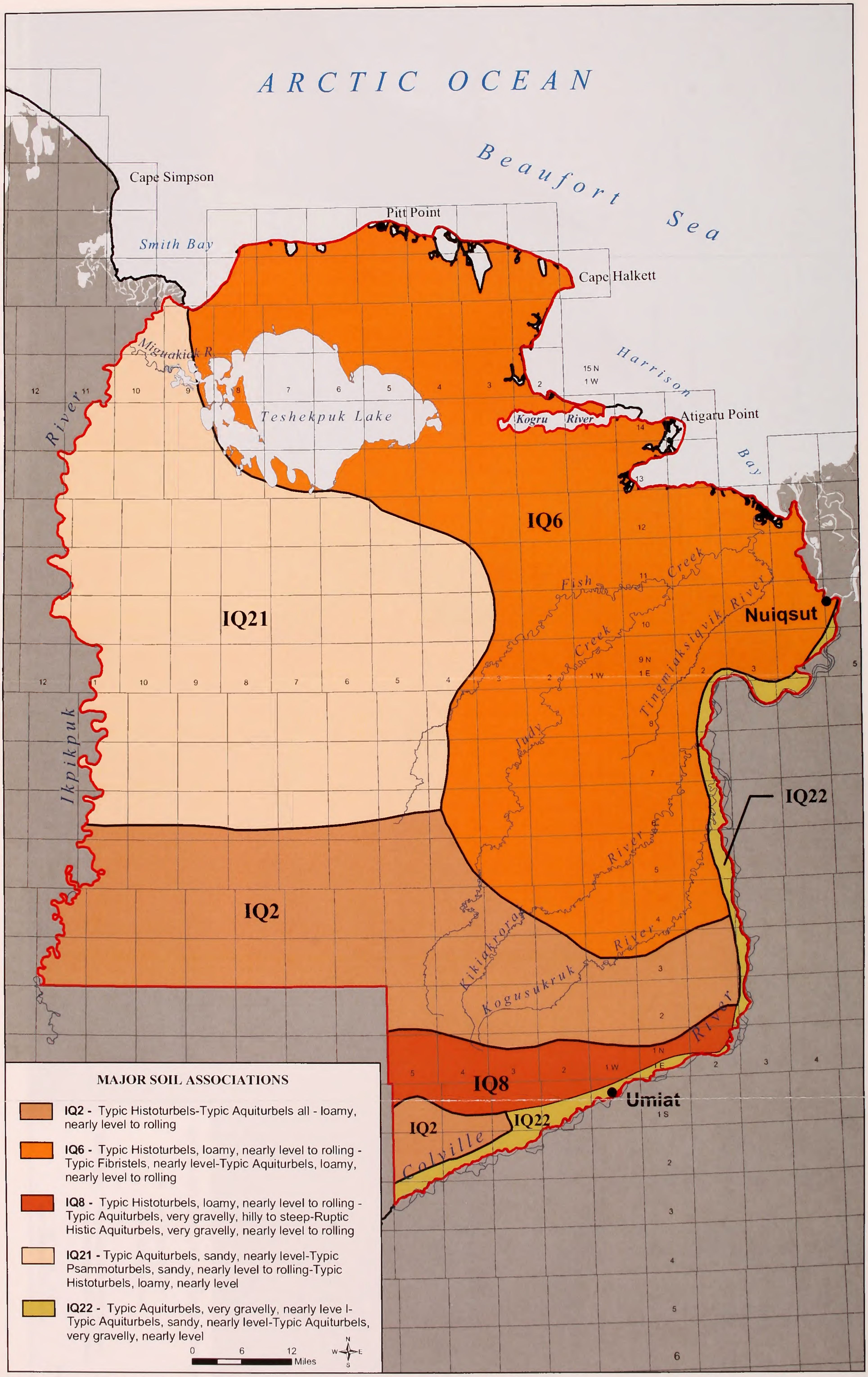
Source: USDOI and MMS 2003

Map 3-3. Oil Potential of the Northeast National Petroleum Reserve-Alaska



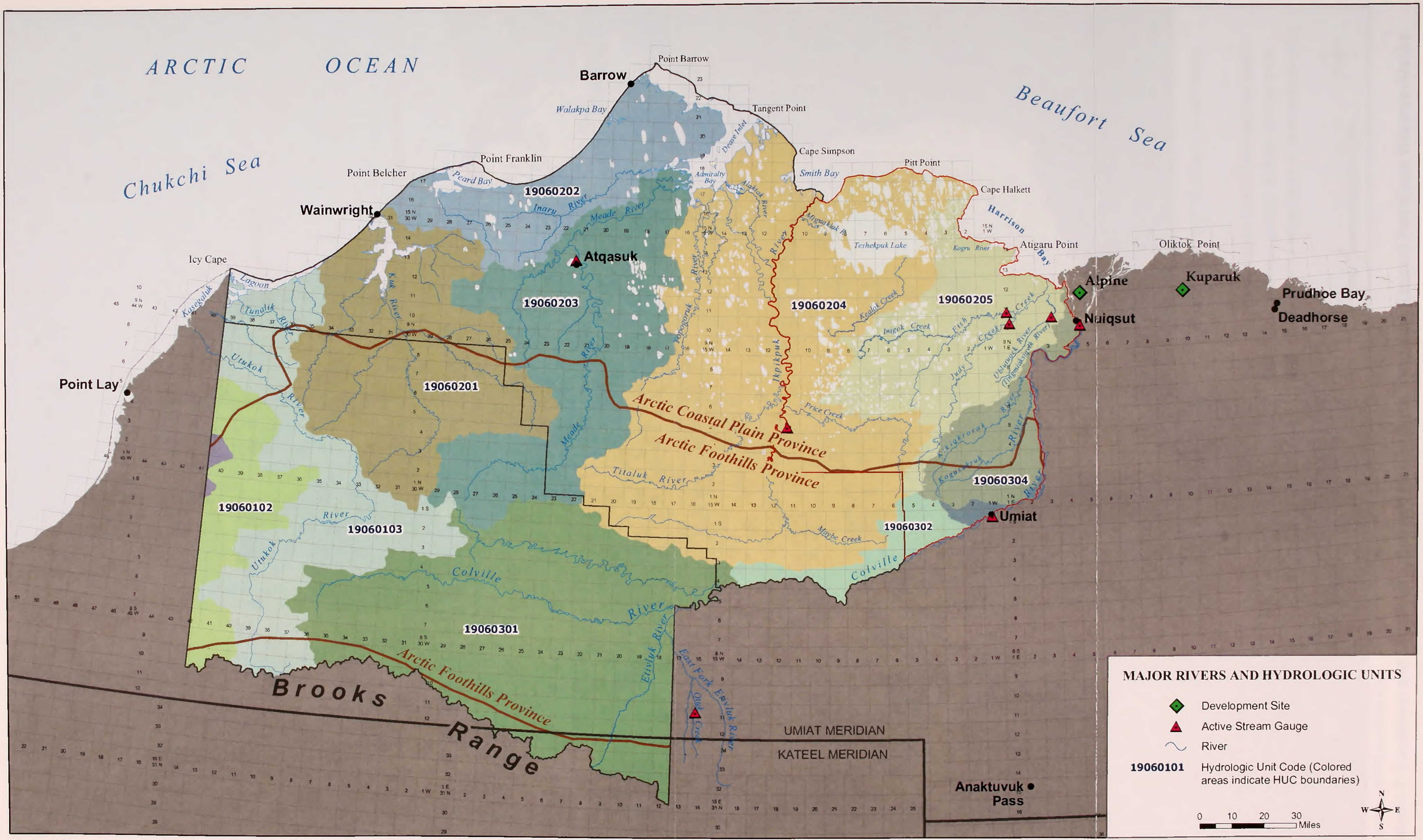
Source: USDOI BLM and MMS 2002

Map 3-4. Oil and Gas Fields and Selected Exploration Wells and Recent Exploratory Wells in the National Petroleum Reserve-Alaska and Prudhoe Bay


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
Teshekpuk Lake
Miguakiak R.
Kogru River
Fish Creek
Judy Creek
Tingmiaksiqvik River
Nuiqsut
Ikpikpuk River
Kikiakrorak River
Kogusukruk
Colville River
Umiat
IQ6
IQ21
IQ2
IQ8
IQ22
15 N
1 W
9 N
1 E
1 N
1 S
MAJOR SOIL ASSOCIATIONS
IQ2 - Typic Histoturbels-Typic Aquiturbels all - loamy, nearly level to rolling
IQ6 - Typic Histoturbels, loamy, nearly level to rolling - Typic Fibristels, nearly level-Typic Aquiturbels, loamy, nearly level to rolling
IQ8 - Typic Histoturbels, loamy, nearly level to rolling - Typic Aquiturbels, very gravelly, hilly to steep-Ruptic Histic Aquiturbels, very gravelly, nearly level to rolling
IQ21 - Typic Aquiturbels, sandy, nearly level-Typic Psammoturbels, sandy, nearly level to rolling-Typic Histoturbels, loamy, nearly level
IQ22 - Typic Aquiturbels, very gravelly, nearly leve l-Typic Aquiturbels, sandy, nearly level-Typic Aquiturbels, very gravelly, nearly level
0
6
12
Miles
N
W
E
S

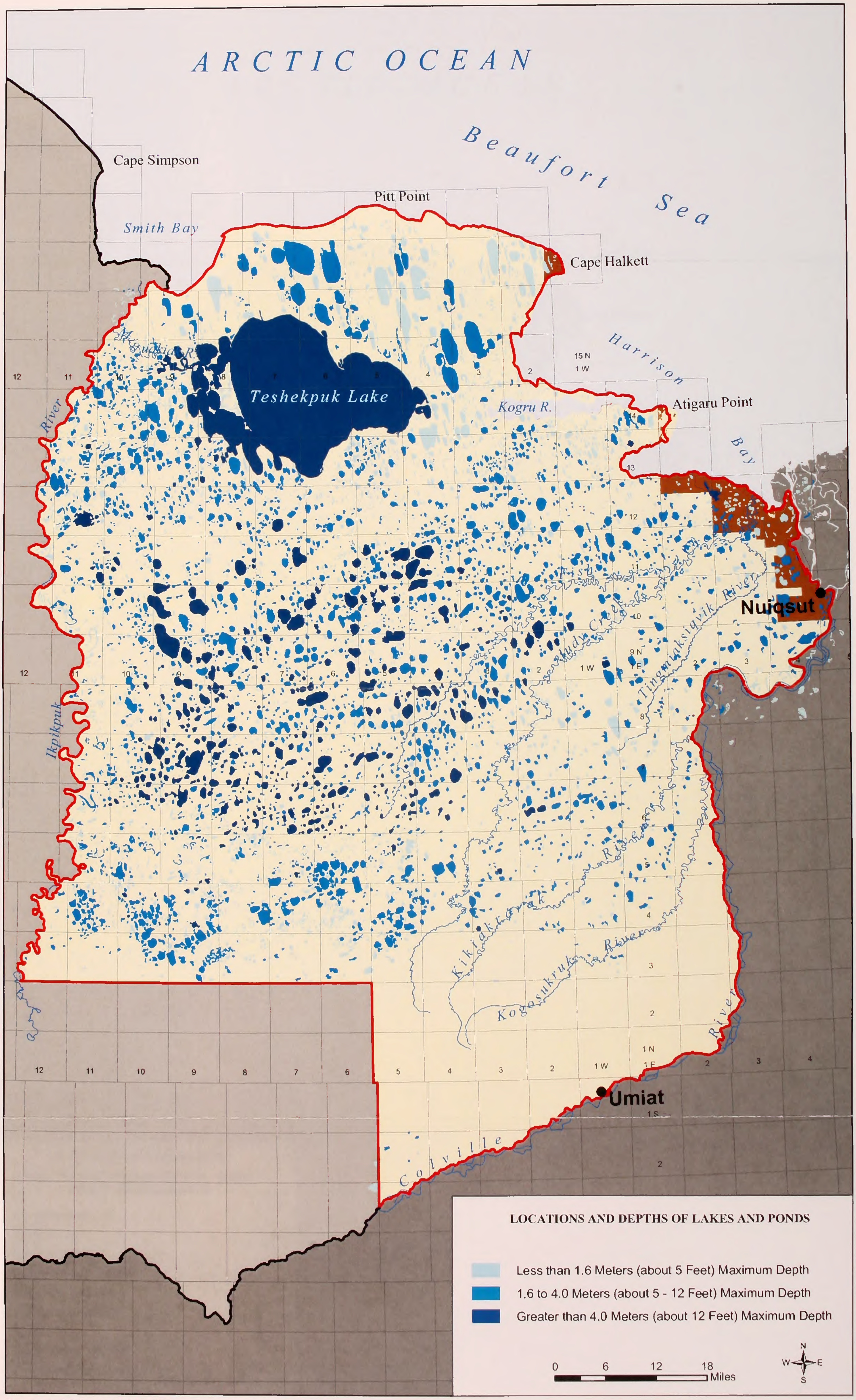
Source: Rieger, Schoephorster, and Furbush 1979

Map 3-5. Soil Types in the Northeast National Petroleum Reserve-Alaska



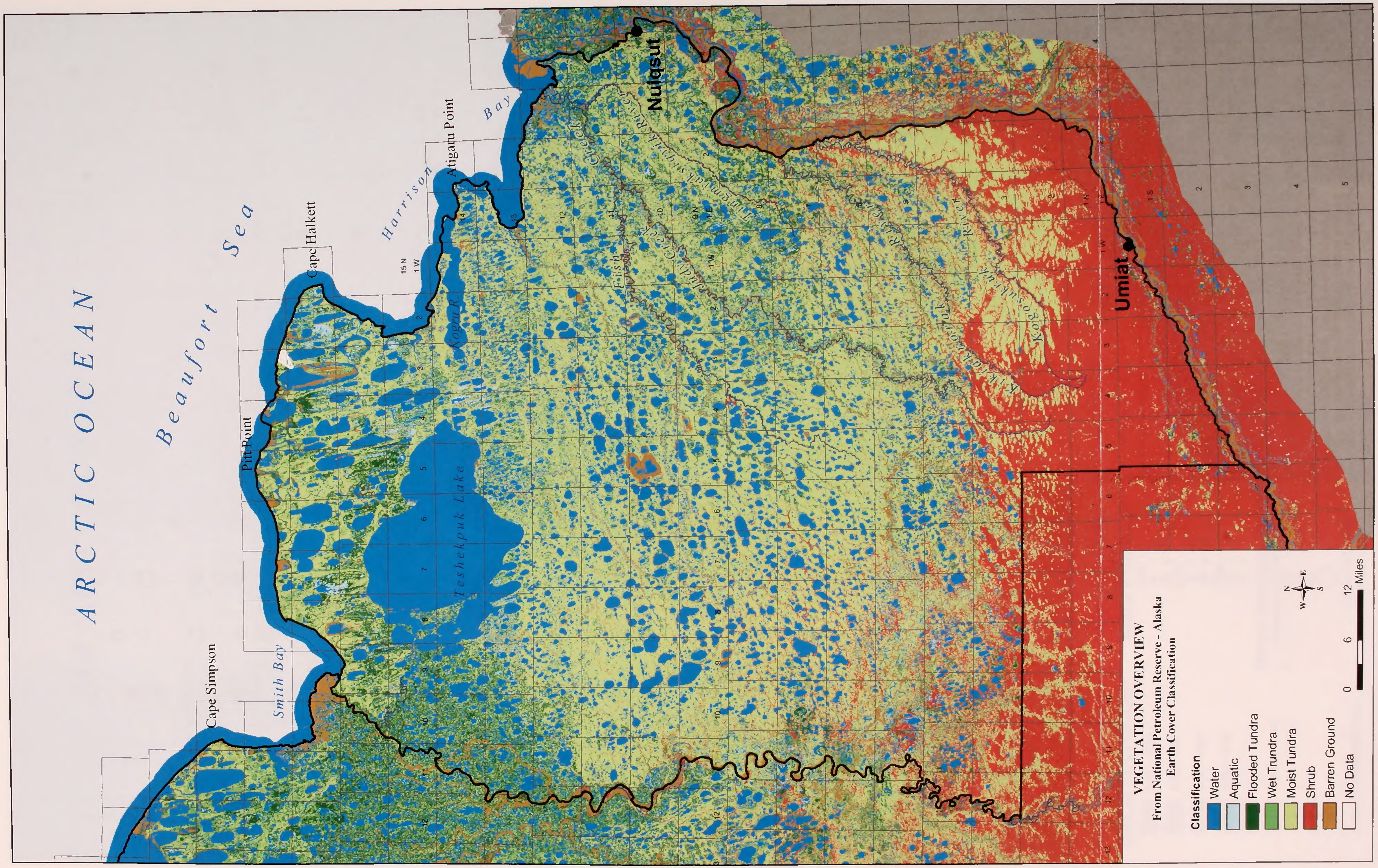
Source: USDOI BLM and USGS 2007; Wahrhaftig, 1965

Map 3-6. Major Rivers and Hydrologic Units in the National Petroleum Reserve-Alaska



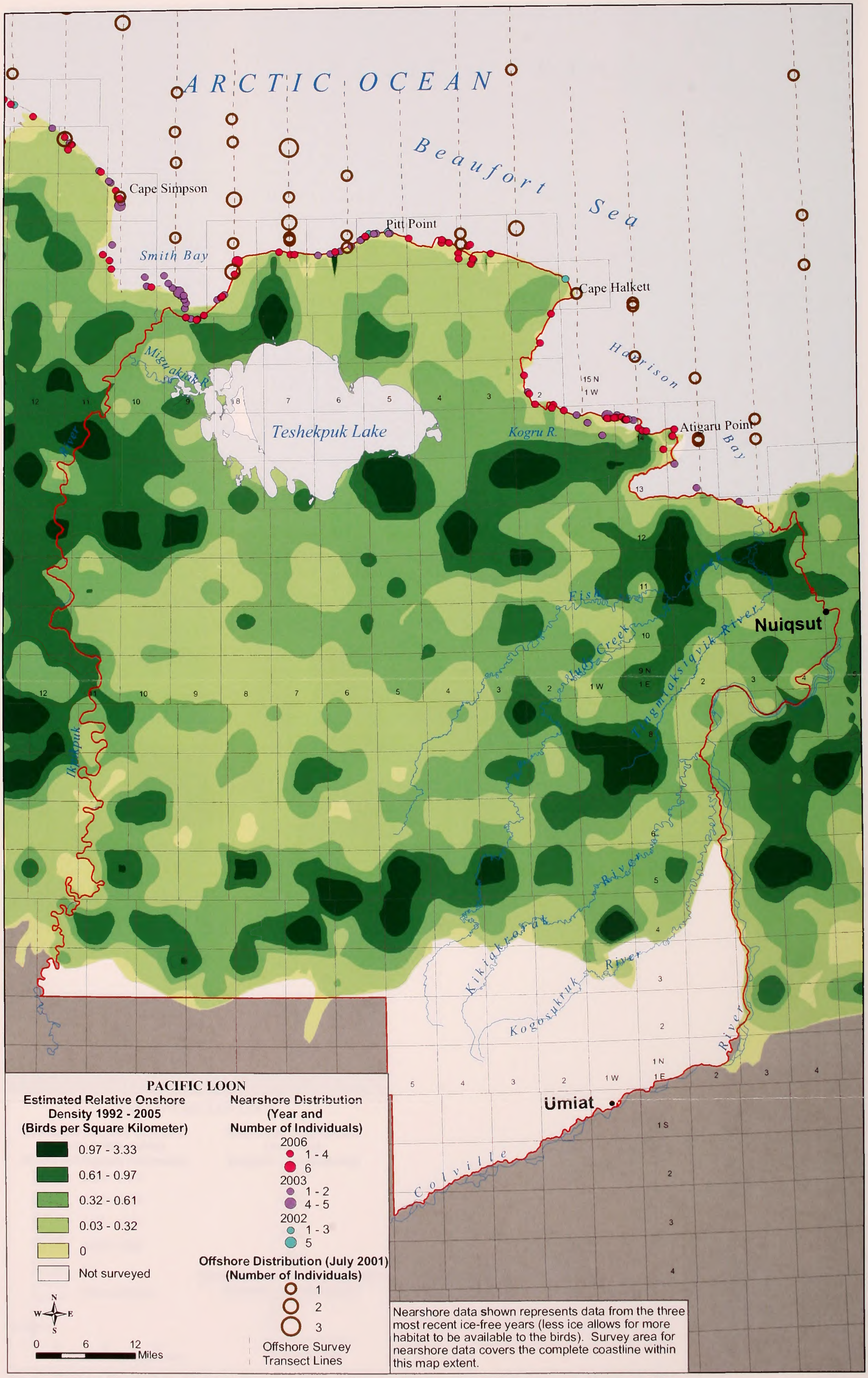
Source: USDOI and MMS 2003

Map 3-7. Locations and Depths of Lakes and Ponds in the Northeast National Petroleum Reserve-Alaska



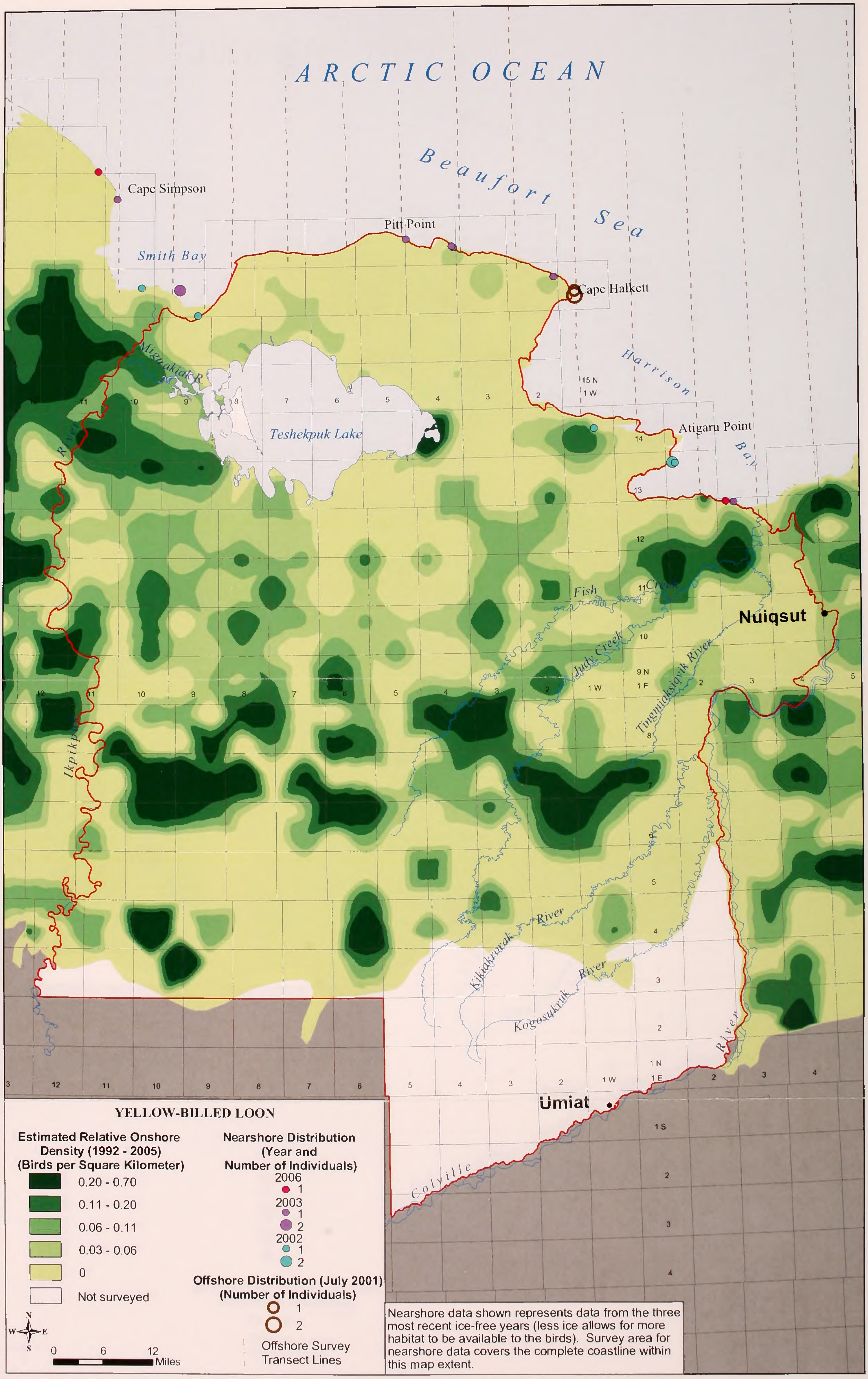
Source: USDOI BLM

Map 3-8. Earth Cover in the Northeast National Petroleum Reserve - Alaska


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
Miguakiak R.
Teshekpuk Lake
Kogru R.
Fish Creek
Judy Creek
Ublutuoch River
Ikpikpuk River
Kikiakrorak River
Kogosukruk River
Colville River
Nuiqsut
Umiat
15 N
1 W
9 N
1 E
1 N
1 S
PACIFIC LOON
Estimated Relative Onshore Density 1992 - 2005 (Birds per Square Kilometer)
0.97 - 3.33
0.61 - 0.97
0.32 - 0.61
0.03 - 0.32
0
Not surveyed
Nearshore Distribution (Year and Number of Individuals)
2006
1 - 4
6
2003
1 - 2
4 - 5
2002
1 - 3
5
Offshore Distribution (July 2001) (Number of Individuals)
1
2
3
Offshore Survey Transect Lines
N
W
E
S
0
6
12
Miles
Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

Source: Onshore Density Data, Offshore Data and Nearshore Data: USFWS Migratory Bird Management, Anchorage, AK

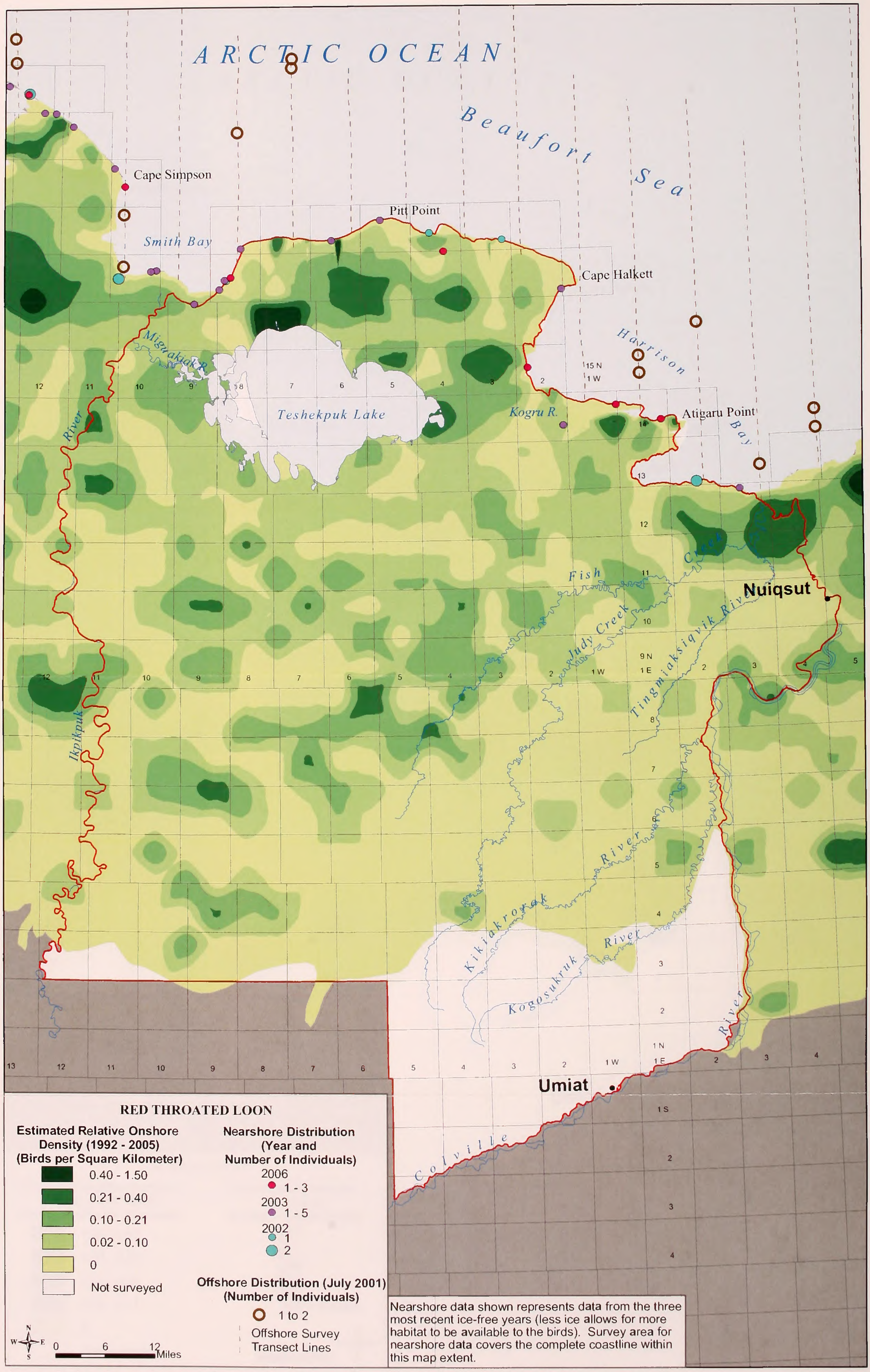
Map 3-9. Onshore Density, Nearshore and Offshore Beaufort Sea Distribution of Pacific Loons in the Northeast National Petroleum Reserve-Alaska



Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

Source: Onshore Density Data, Nearshore Data and Offshore Data: USFWS Migratory Bird Management, Anchorage, AK

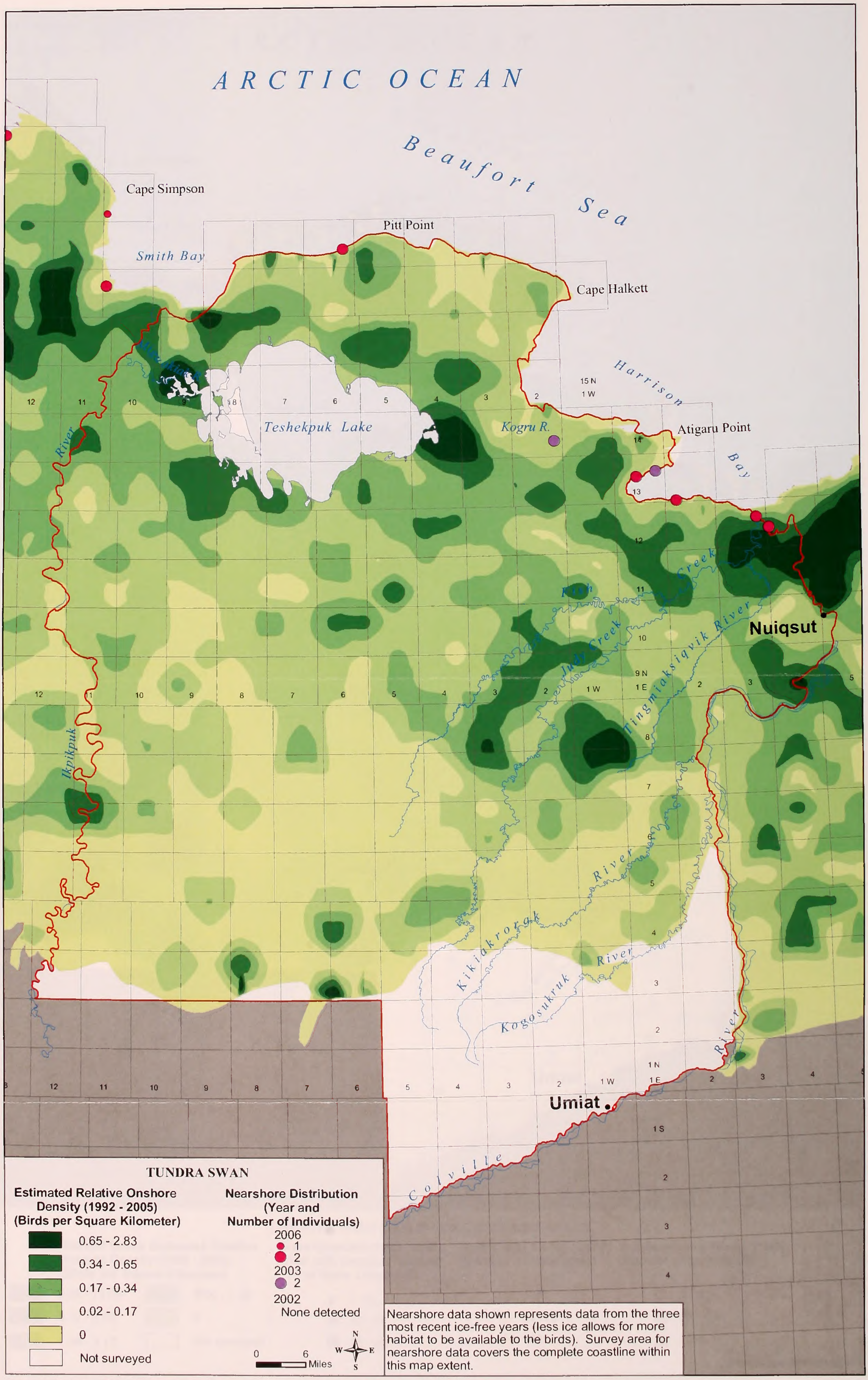
Map 3-10. Onshore Density, Nearshore and Offshore Beaufort Sea Distribution of Yellow-billed Loons in the Northeast National Petroleum Reserve-Alaska



Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

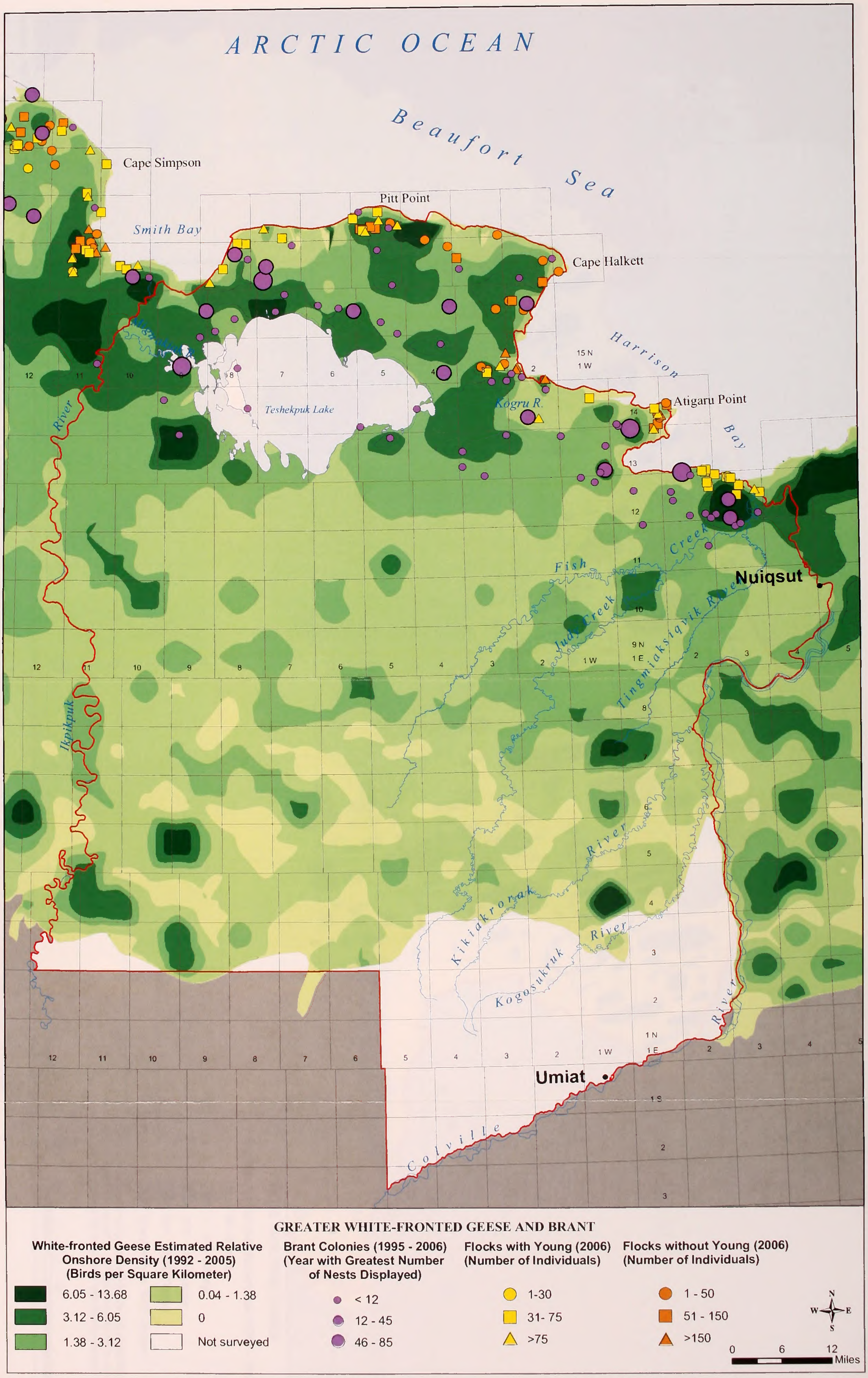
Source: Onshore Density Data, Nearshore Data, and Offshore Data: USFWS Migratory Bird Management, Anchorage, AK

Map 3-11. Onshore Density, Nearshore and Offshore Beaufort Sea Locations of Red-Throated Loons in the Northeast National Petroleum Reserve-Alaska


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
Kogru R.
Teshekpuk Lake
Fish Creek
Judy Creek
Tingmiaksiqvik River
Nuiqsut
Ikpikpuk River
Kikiakrorak River
Kogosukruk River
Colville River
Umiat
15 N
1 W
9 N
1 E
1 N
1 E
1 W
1 S
TUNDRA SWAN
Estimated Relative Onshore Density (1992 - 2005) (Birds per Square Kilometer)
0.65 - 2.83
0.34 - 0.65
0.17 - 0.34
0.02 - 0.17
0
Not surveyed
Nearshore Distribution (Year and Number of Individuals)
2006
1
2
2003
2
2002
None detected
0
6
Miles
N
W
E
S
Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

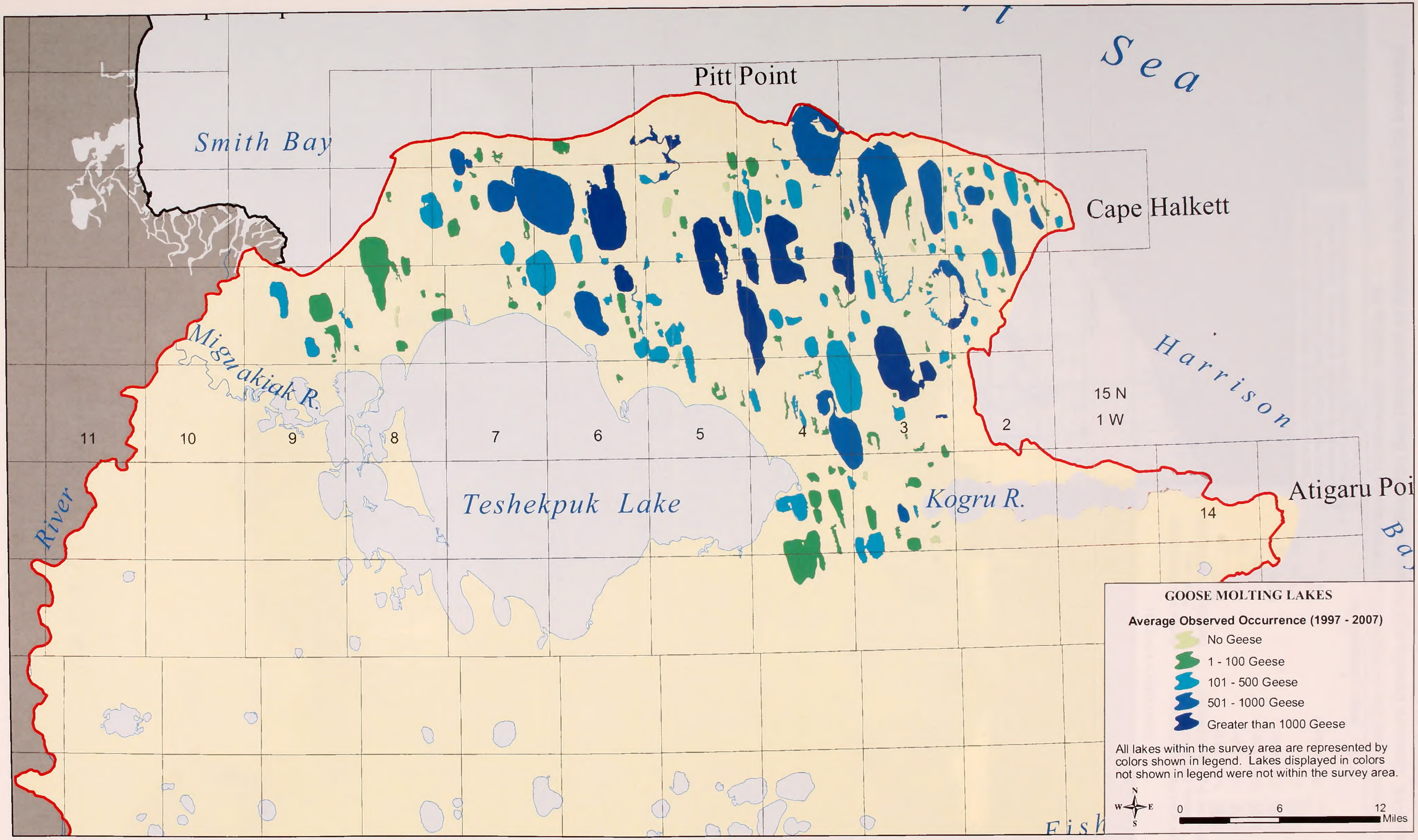
Source: Onshore Density Data and Nearshore Data: USFWS Migratory Bird Management, Anchorage, AK

Map 3-12. Onshore Density and Nearshore Beaufort Sea Locations of Tundra Swans in the Northeast National Petroleum Reserve-Alaska



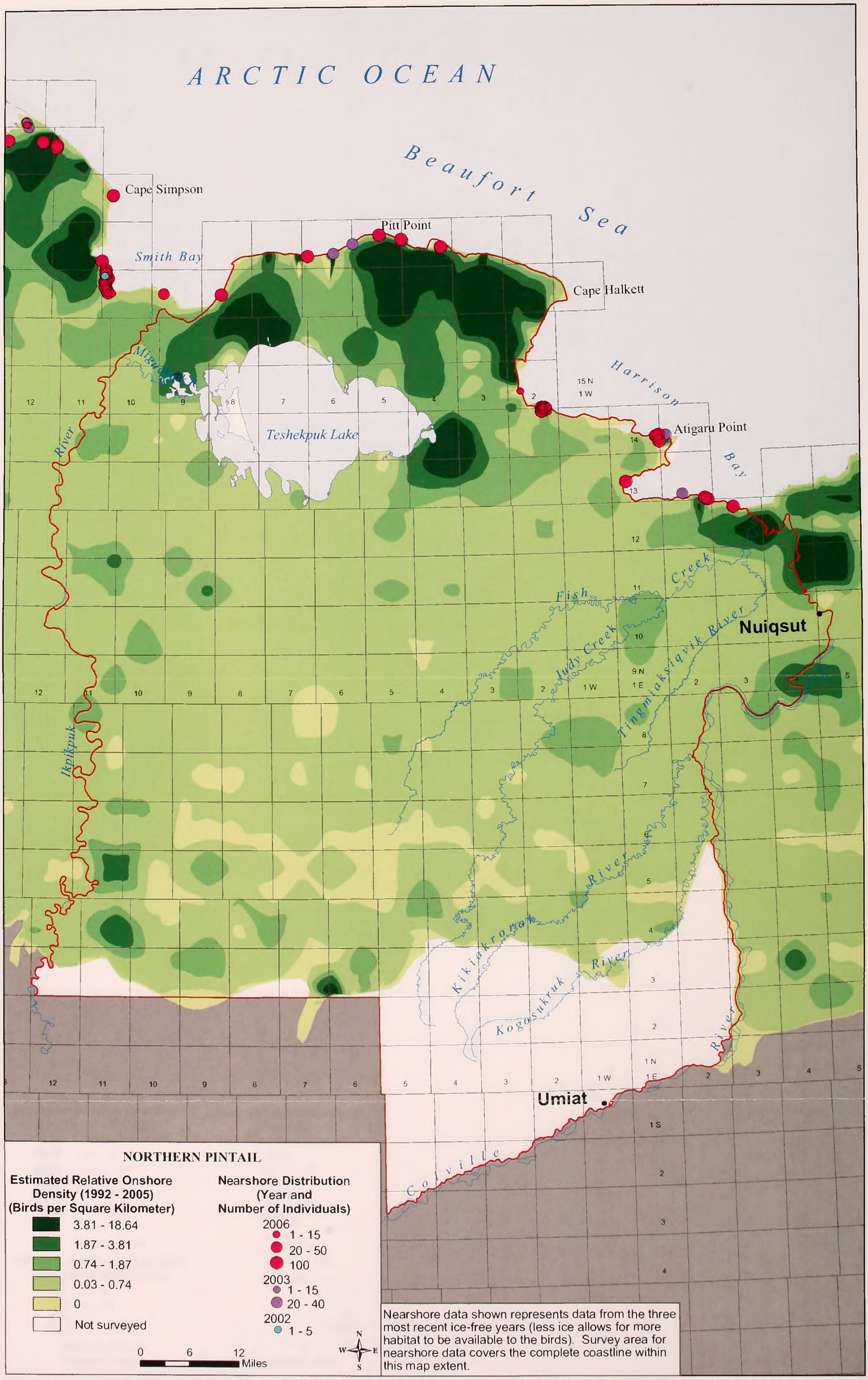
Source: Onshore Density Data (White-fronted Geese): USFWS Migratory Bird Management, Anchorage, AK; and ABR, Inc. 2006 (Brant)

Map 3-13. Onshore Density of Greater White-fronted Geese and Brant Breeding Colonies and Post-nesting Brood Flocks in the Northeast National Petroleum Reserve-Alaska



Source: USFWS Migratory Bird Management, Fairbanks, AK

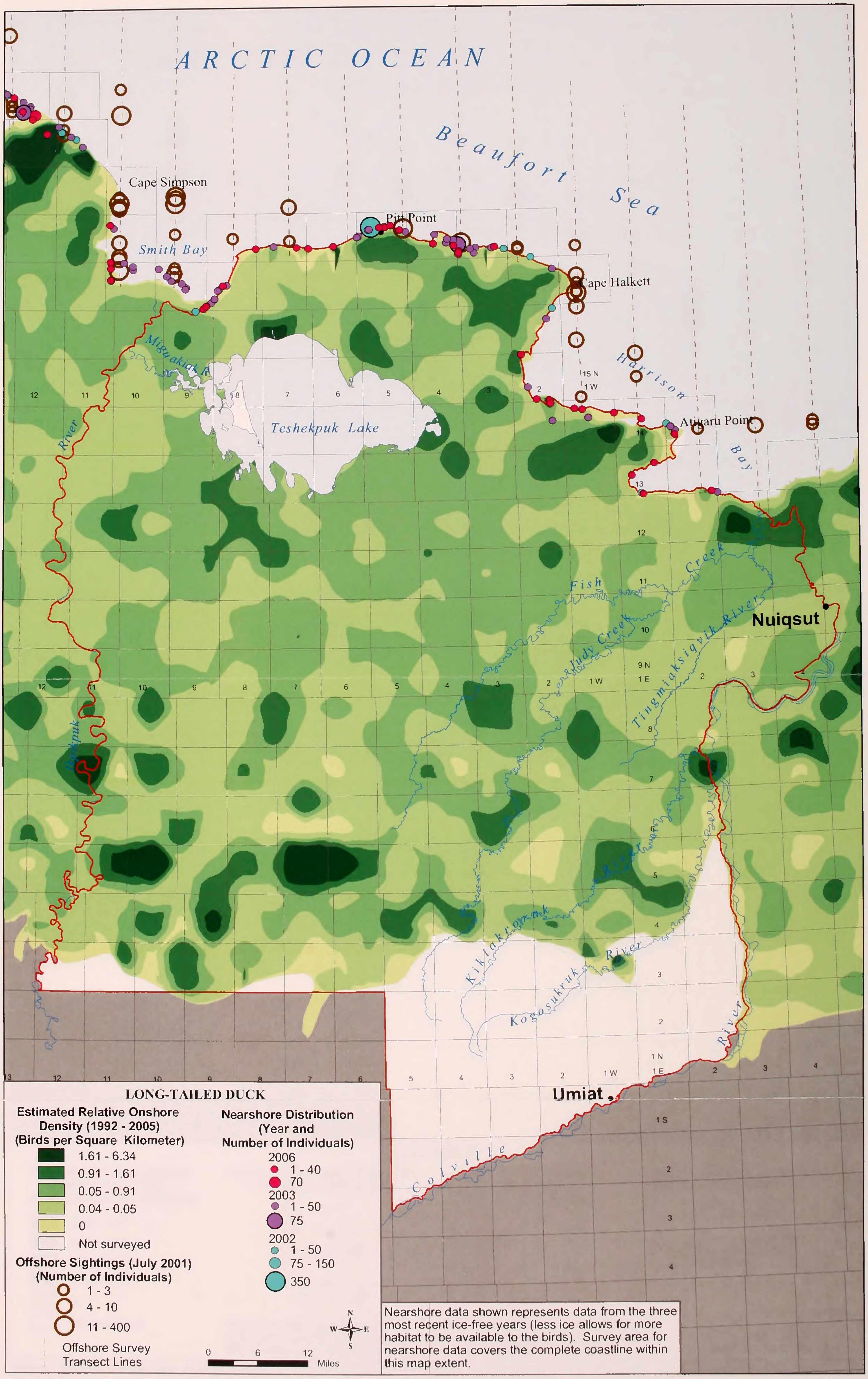
Map 3-14. Average Occurrence of all Adult and Juvenile Geese on Goose Molting Lakes in the Northeast National Petroleum Reserve-Alaska



Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

Source: Onshore Density Data and Nearshore Data: USFWS Migratory Bird Management, Anchorage, AK

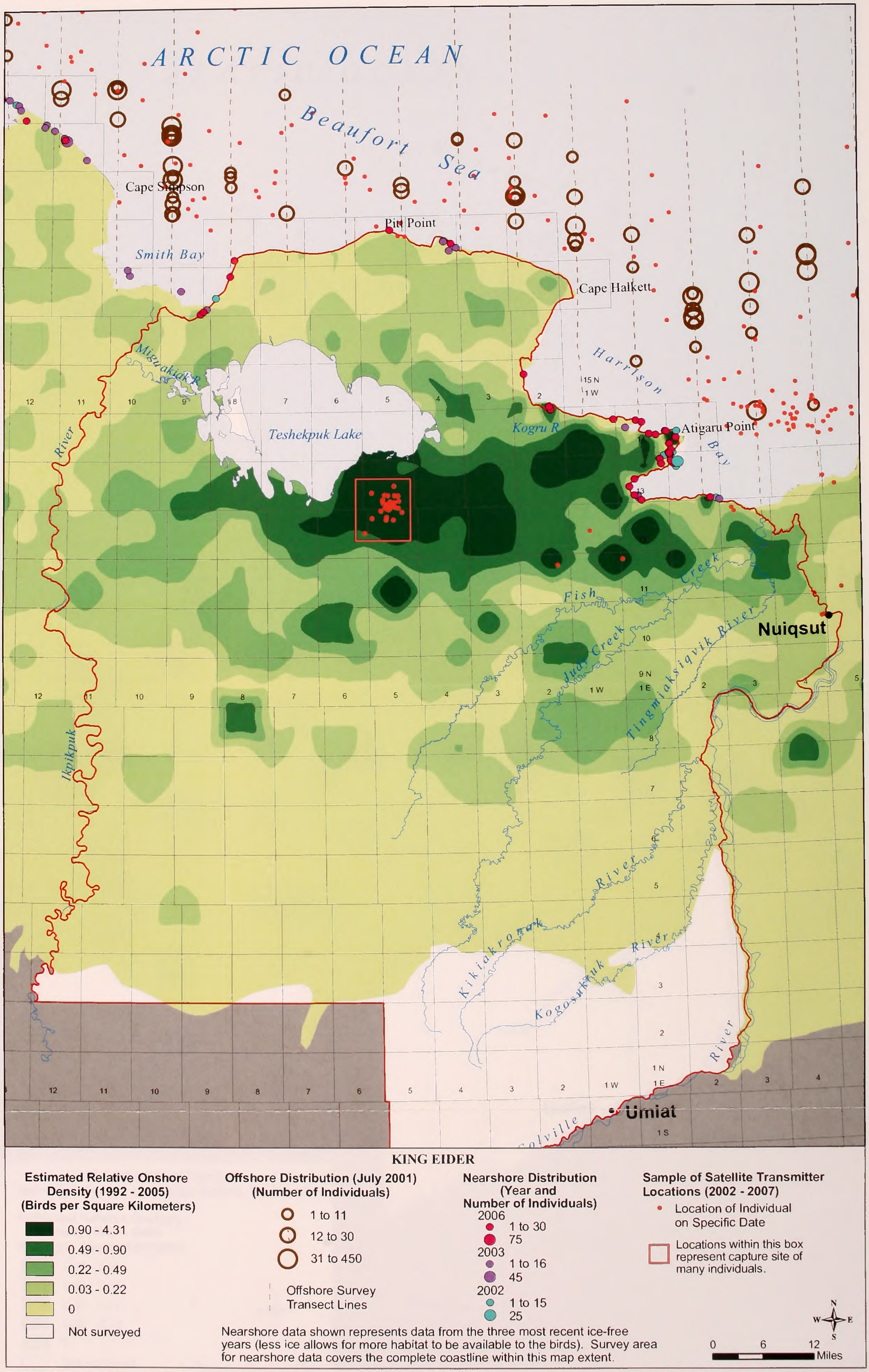
Map 3-15. Onshore Density and Nearshore Beaufort Sea Dstribution of Northern Pintails in the Northeast National Petroleum Reserve-Alaska



Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

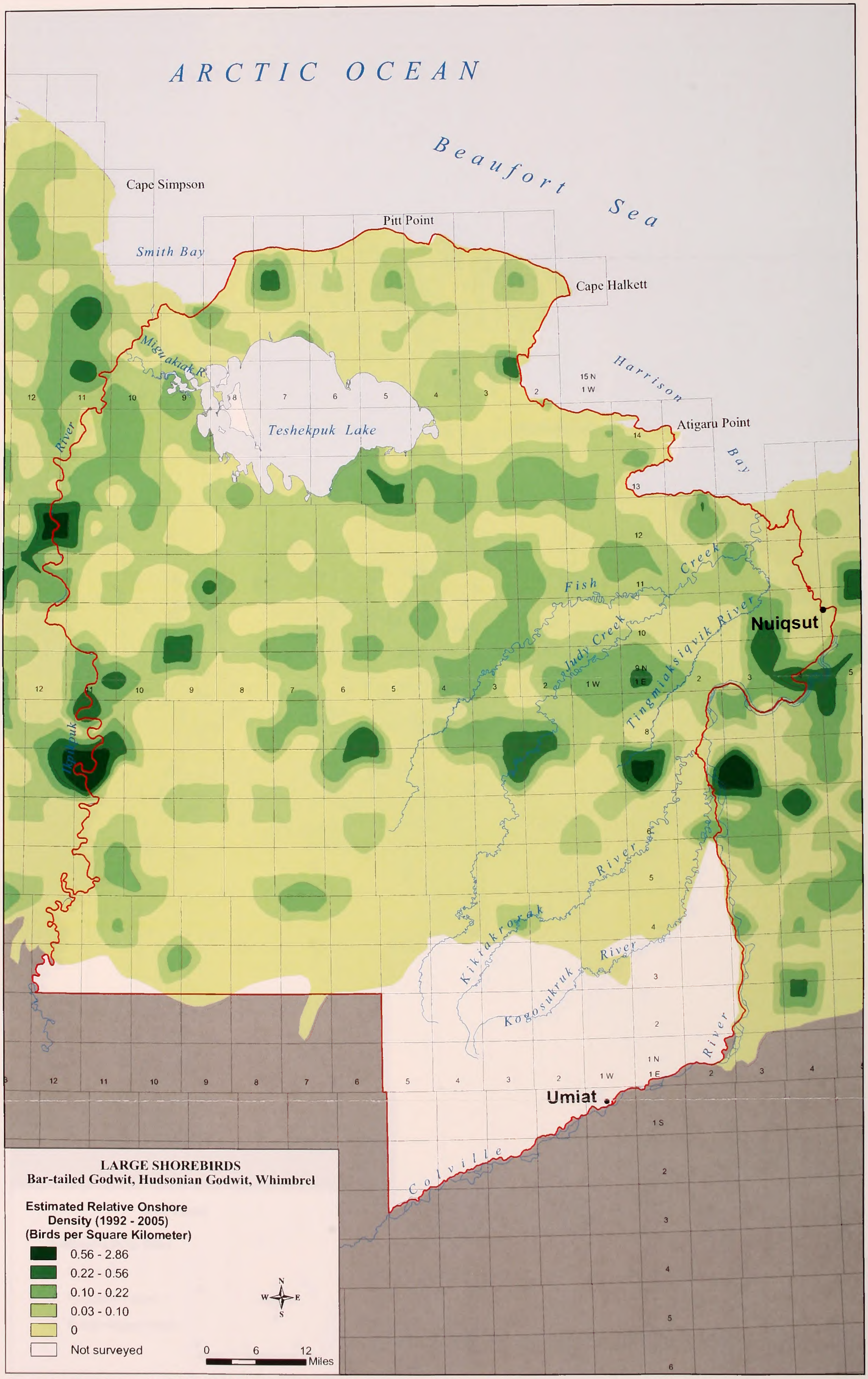
Source: Onshore Density Data, Offshore Data and Nearshore Data: USFWS Migratory Bird Management, Anchorage, AK

Map 3-16. Onshore Density, Nearshore and Offshore Beaufort Sea Distribution of Long-tailed Ducks in the Northeast National Petroleum Reserve-Alaska


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
Kogru R
Teshekpuk Lake
Miguakiak R
Ikpikpuk River
Fish Creek
Judy Creek
Tingmiaksiqvik River
Nuiqsut
Kikiakrorak River
Kogosukruk River
Colville River
Umiat
15 N
1 W
9 N
1 E
1 N
1 E
1 W
1 S
KING EIDER
Estimated Relative Onshore Density (1992 - 2005) (Birds per Square Kilometers)
0.90 - 4.31
0.49 - 0.90
0.22 - 0.49
0.03 - 0.22
0
Not surveyed
Offshore Distribution (July 2001) (Number of Individuals)
1 to 11
12 to 30
31 to 450
Offshore Survey Transect Lines
Nearshore Distribution (Year and Number of Individuals)
2006
1 to 30
75
2003
1 to 16
45
2002
1 to 15
25
Sample of Satellite Transmitter Locations (2002 - 2007)
Location of Individual on Specific Date
Locations within this box represent capture site of many individuals.
Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.
N
W
E
S
0
6
12
Miles

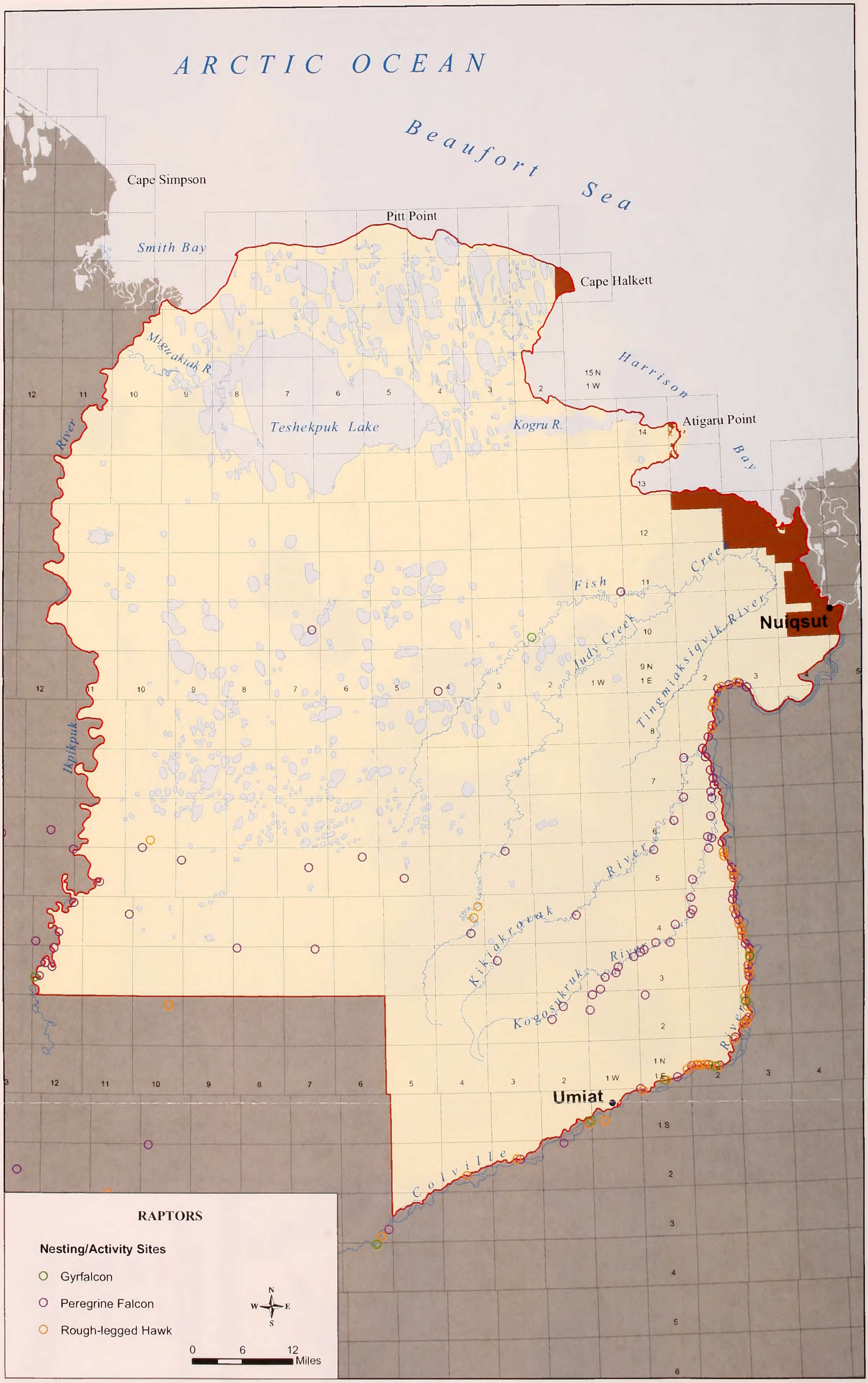
Source: Onshore Density Data, Nearshore Data, and Offshore Data: USFWS Migratory Bird Management, Anchorage, AK; Satellite Transmitter Data: Minerals Management Service, Anchorage, AK

Map 3-17. Onshore Density, Nearshore and Offshore Beaufort Sea Distribution and Selected Locations of Satellite Transmitter Equipped King Eiders in the Northeast National Petroleum Reserve-Alaska



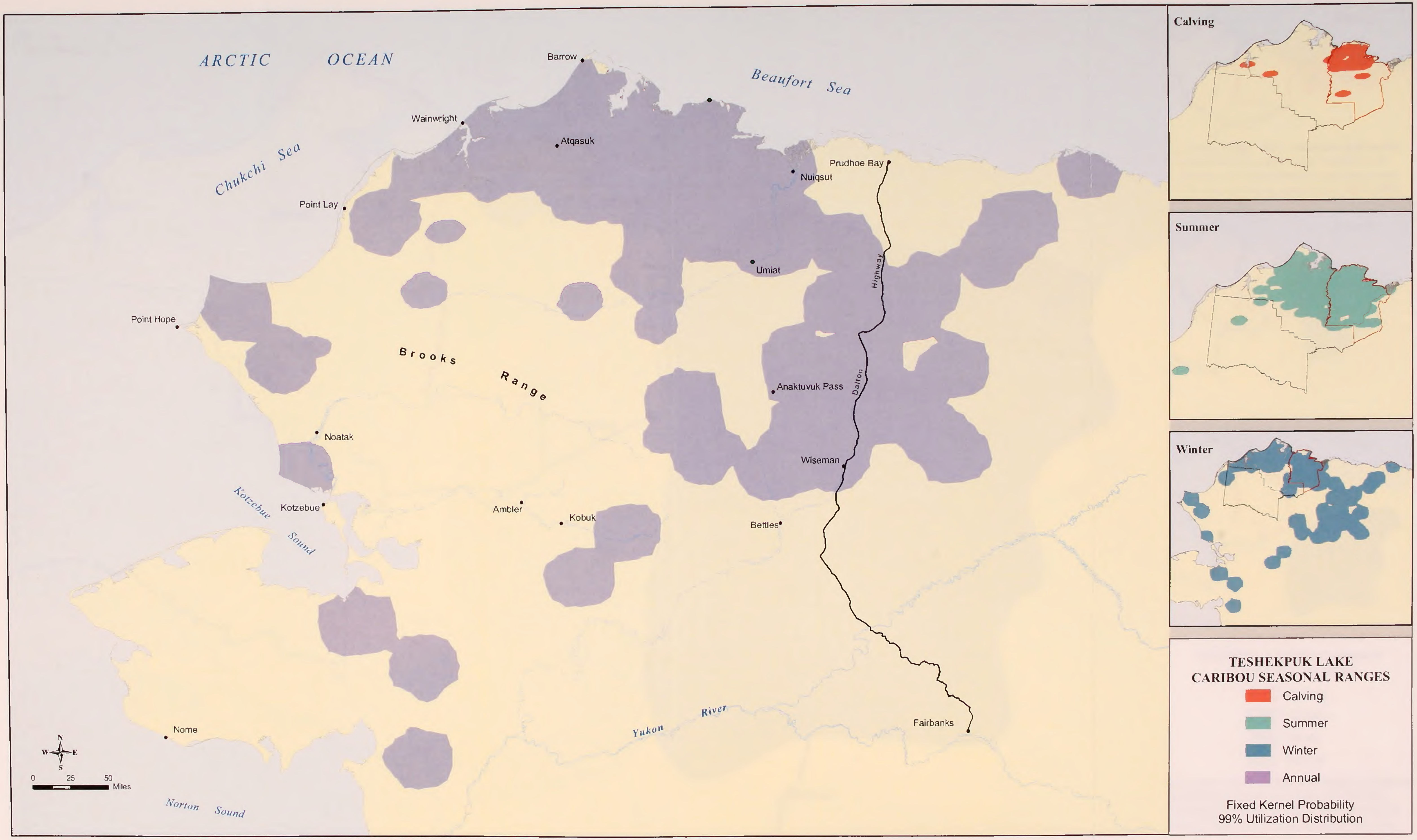
Source: Onshore Density Data: USFWS Migratory Bird Management, Anchorage, AK

Map 3-18. Onshore Density of Large Shorebirds in the Northeast National Petroleum Reserve-Alaska



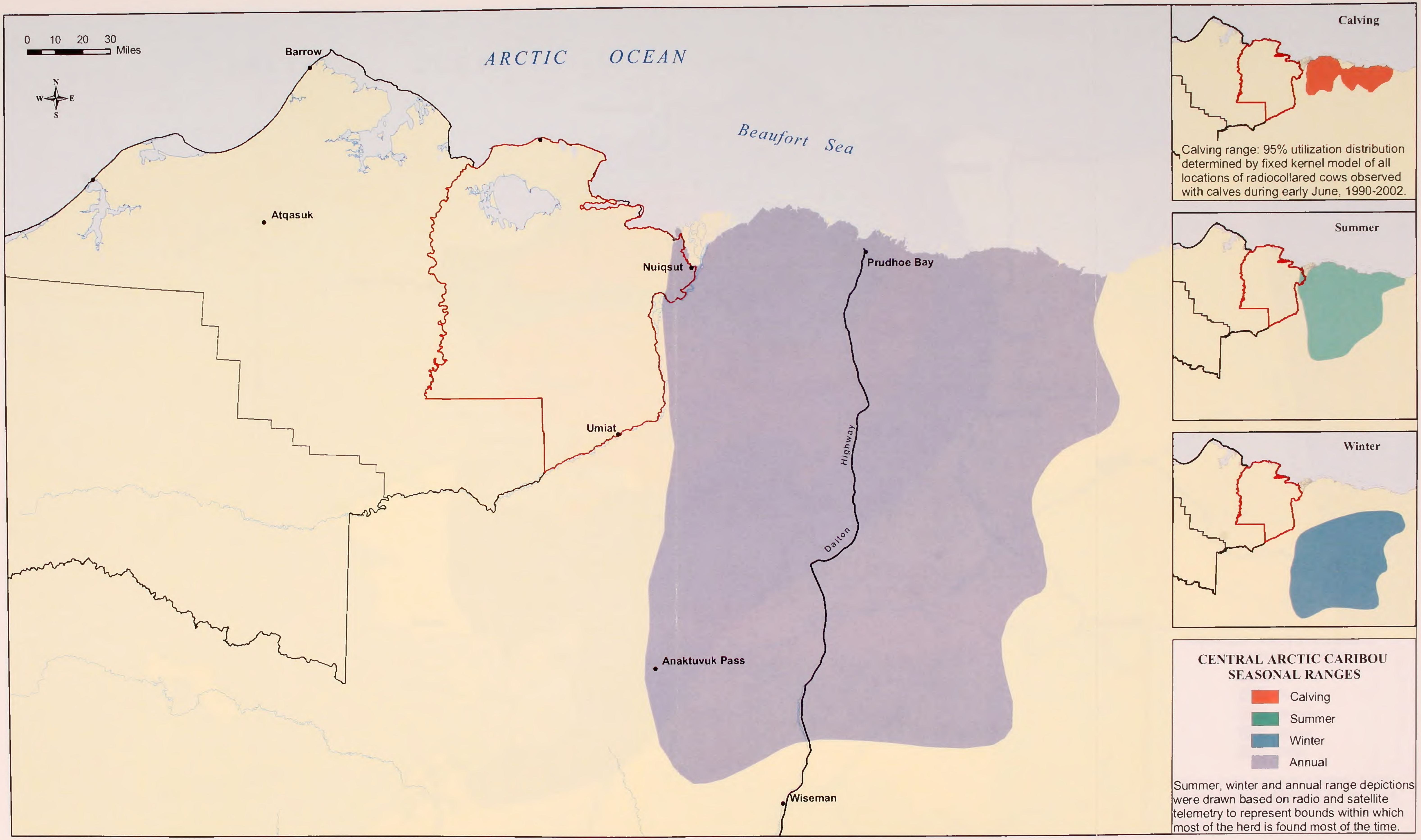
Source: USFWS, Fairbanks Fish and Wildlife Field Office Endangered Species Branch; BLM, Fairbanks District Office, Arctic Field Office

Map 3-19. Locations of Raptor Nesting/Activity Sites in the Northeast National Petroleum Reserve-Alaska



Source: Alaska Department of Fish & Game, North Slope Borough, USDOI BLM and ABR Inc. - Environmental Research and Services

Map 3-20. Teshekpuk Lake Caribou Herd Seasonal Ranges in Northern Alaska (1990 - 2005 Satellite Telemetry Data)

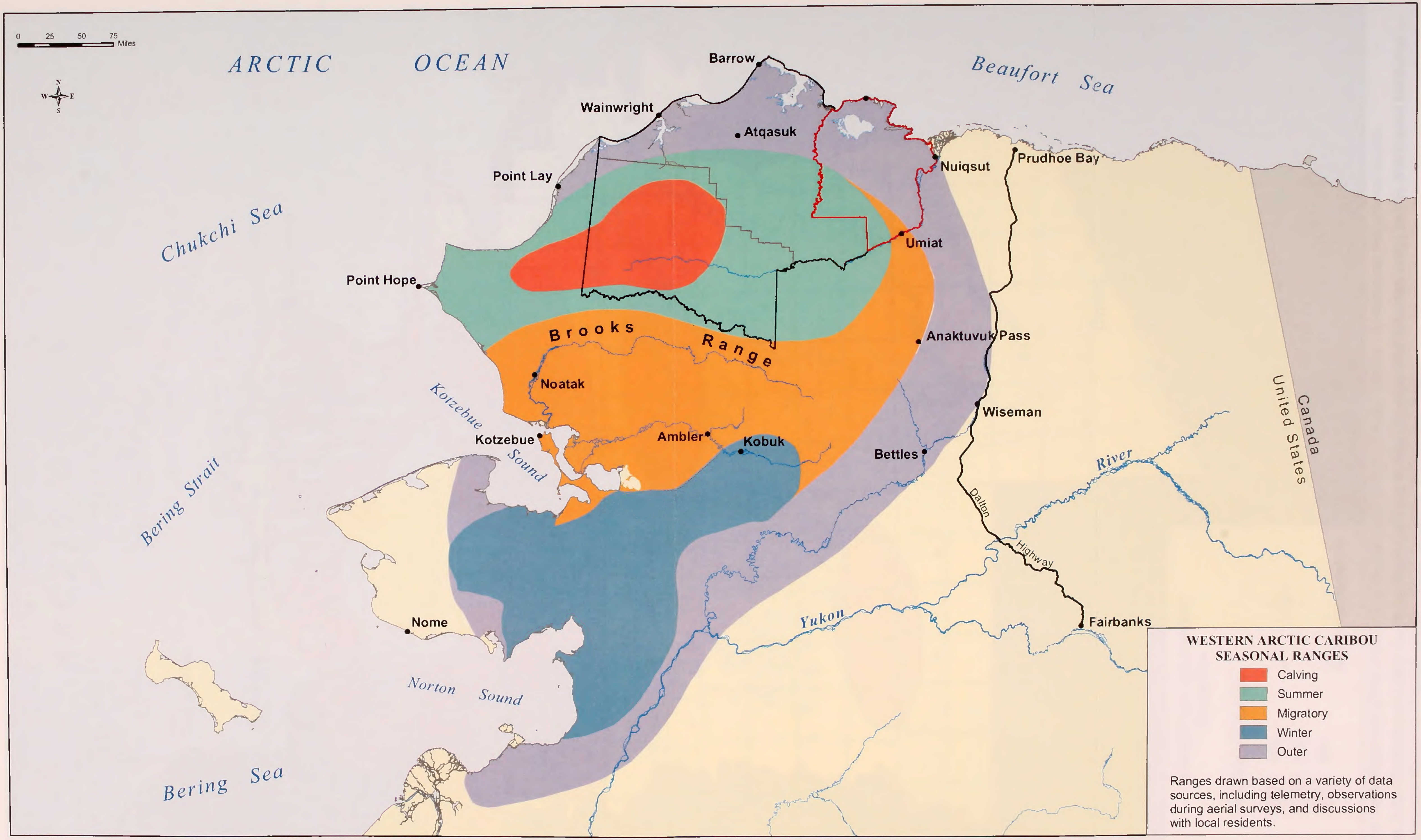


Calving range: 95% utilization distribution determined by fixed kernel model of all locations of radiocollared cows observed with calves during early June, 1990-2002.

Summer, winter and annual range depictions were drawn based on radio and satellite telemetry to represent bounds within which most of the herd is found most of the time.

Source: Alaska Department of Fish & Game

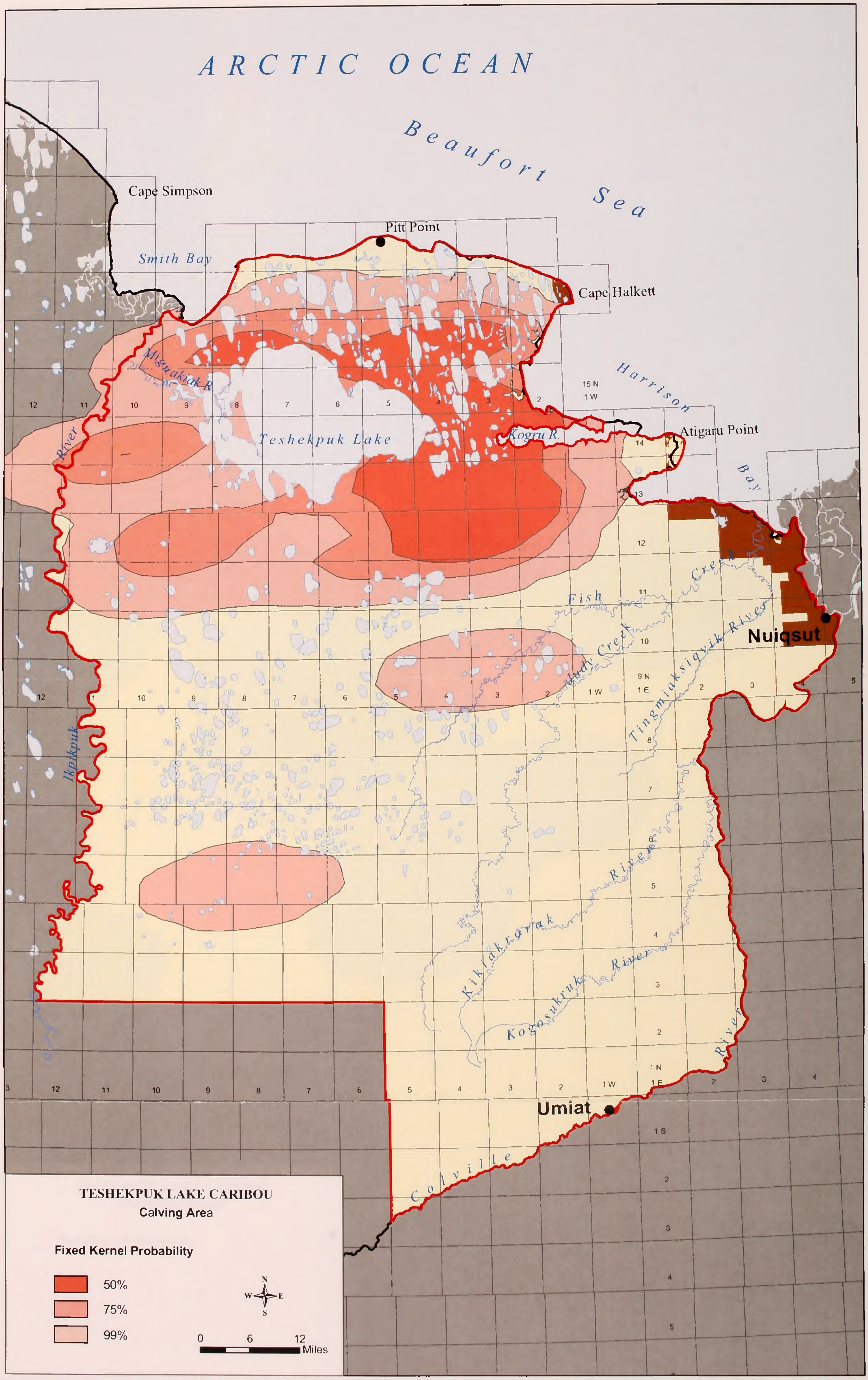
Map 3-21. Central Arctic Caribou Herd Seasonal Ranges in Northern Alaska



Ranges drawn based on a variety of data sources, including telemetry, observations during aerial surveys, and discussions with local residents.

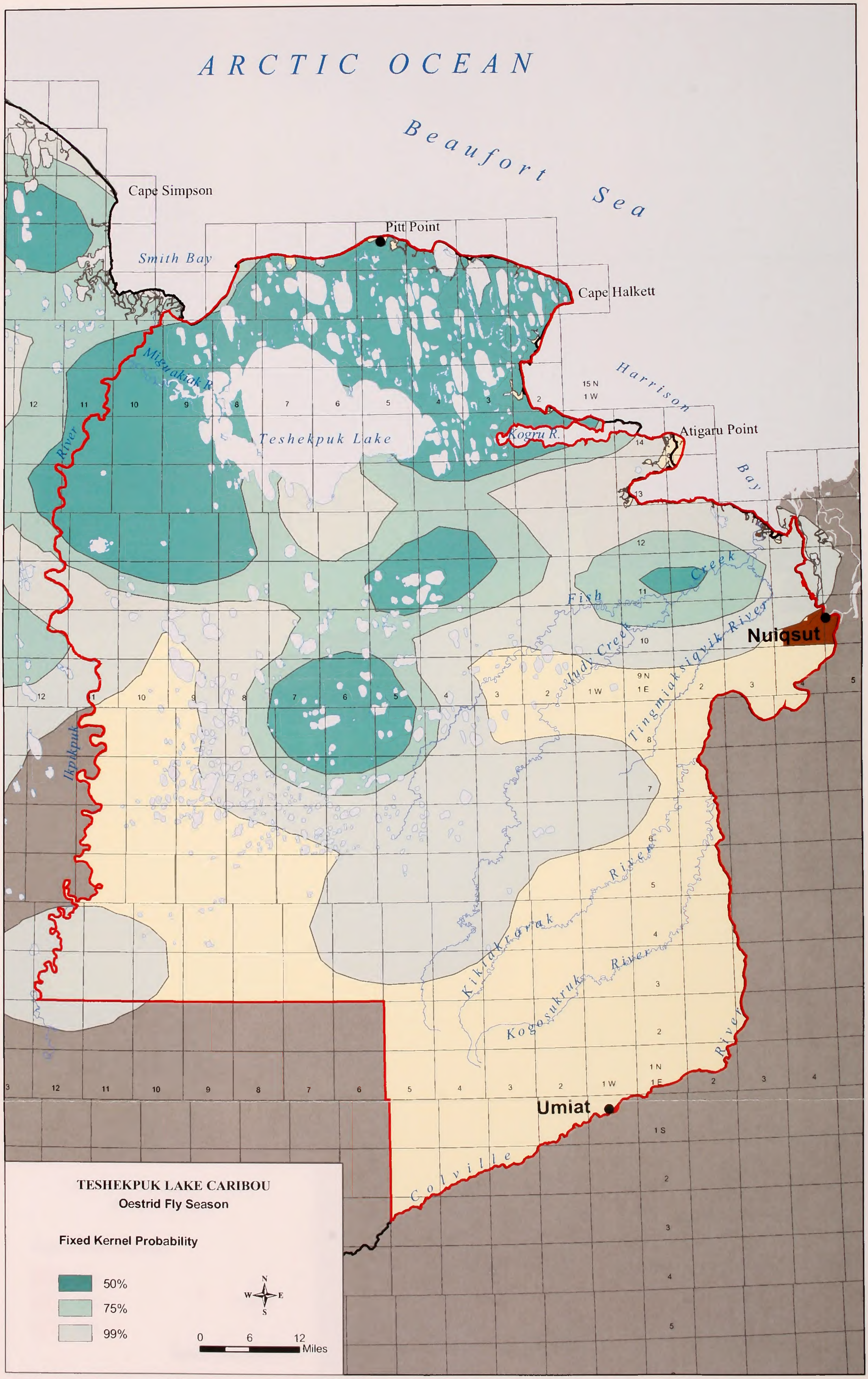
Source: Alaska Department of Fish and Game

Map 3-22. Western Arctic Caribou Herd Seasonal Ranges in Northern Alaska



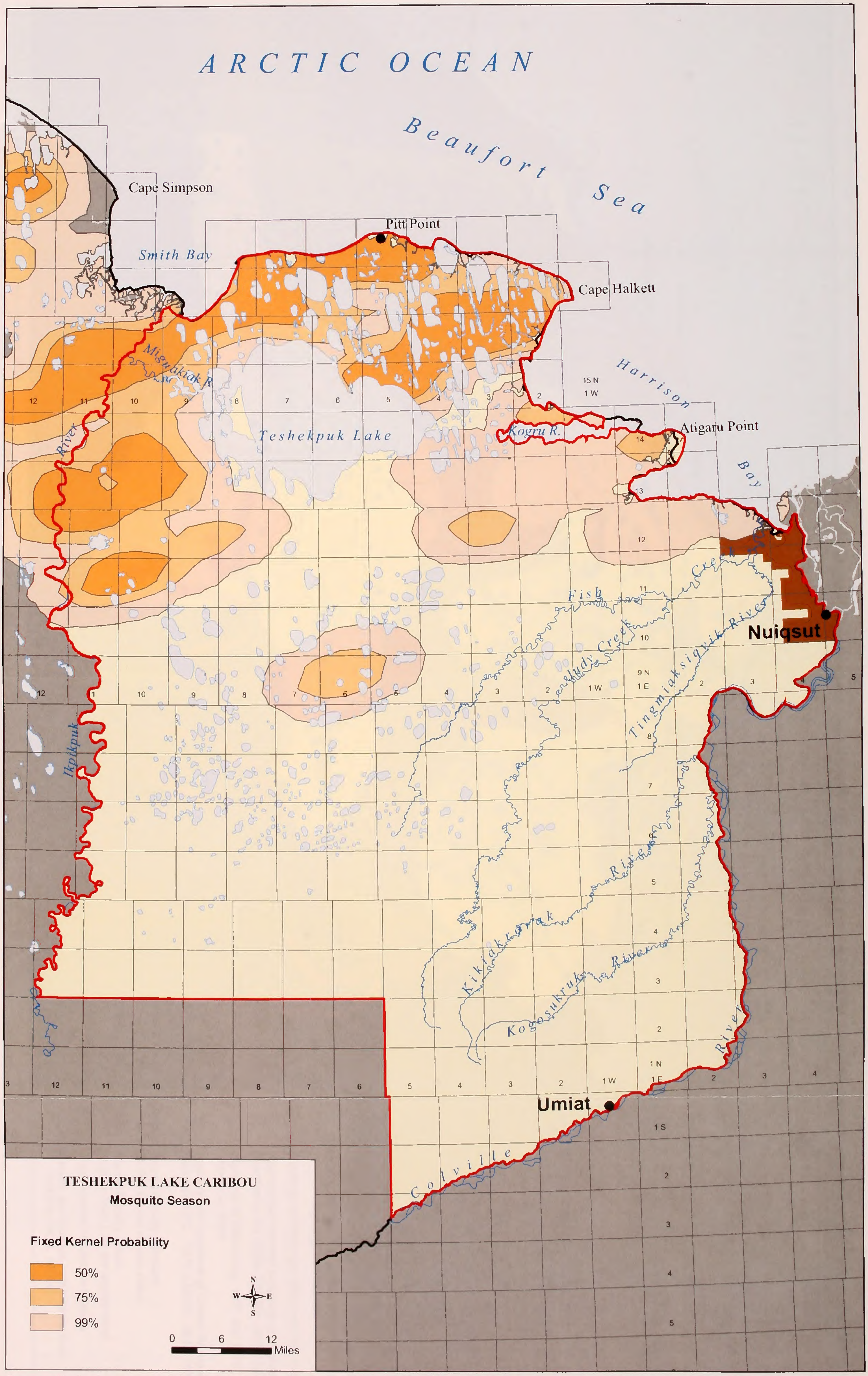
Source: Alaska Department of Fish & Game, North Slope Borough, USDOI - BLM and ABR Inc. - Environmental Research and Services

Map 3-23. Teshekpuk Lake Caribou Herd Calving Areas (successful females only) in the Northeast National Petroleum Reserve-Alaska (1990 - 2005 Satellite Telemetry Data)



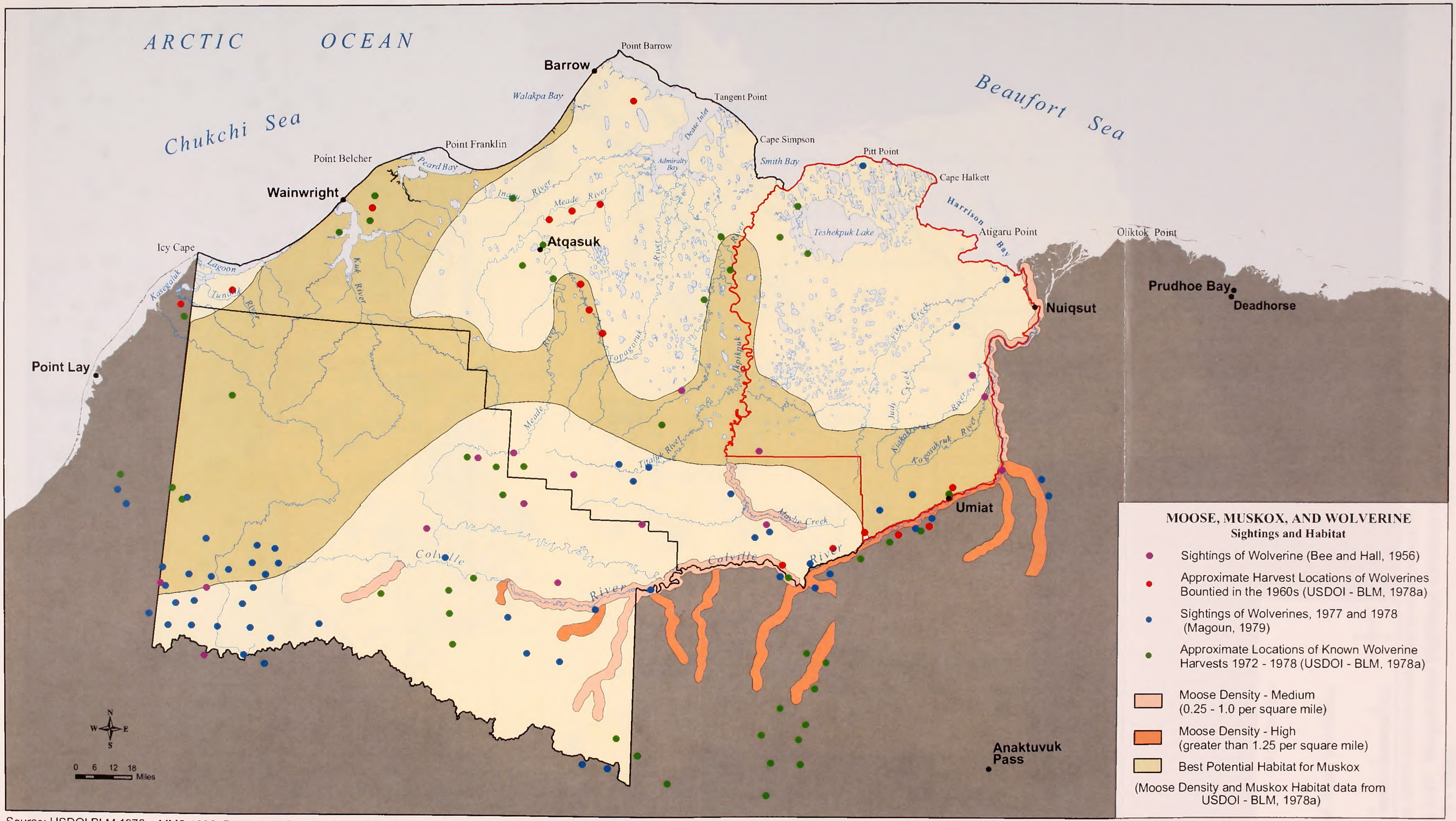
Source: Alaska Department of Fish & Game, North Slope Borough, USDOI - BLM and ABR Inc. - Environmental Research and Services

Map 3-24. Teshekpuk Lake Caribou Herd Oestrid Fly Relief Areas in the Northeast National Petroleum Reserve-Alaska (1990 - 2005 Satellite Telemetry Data)



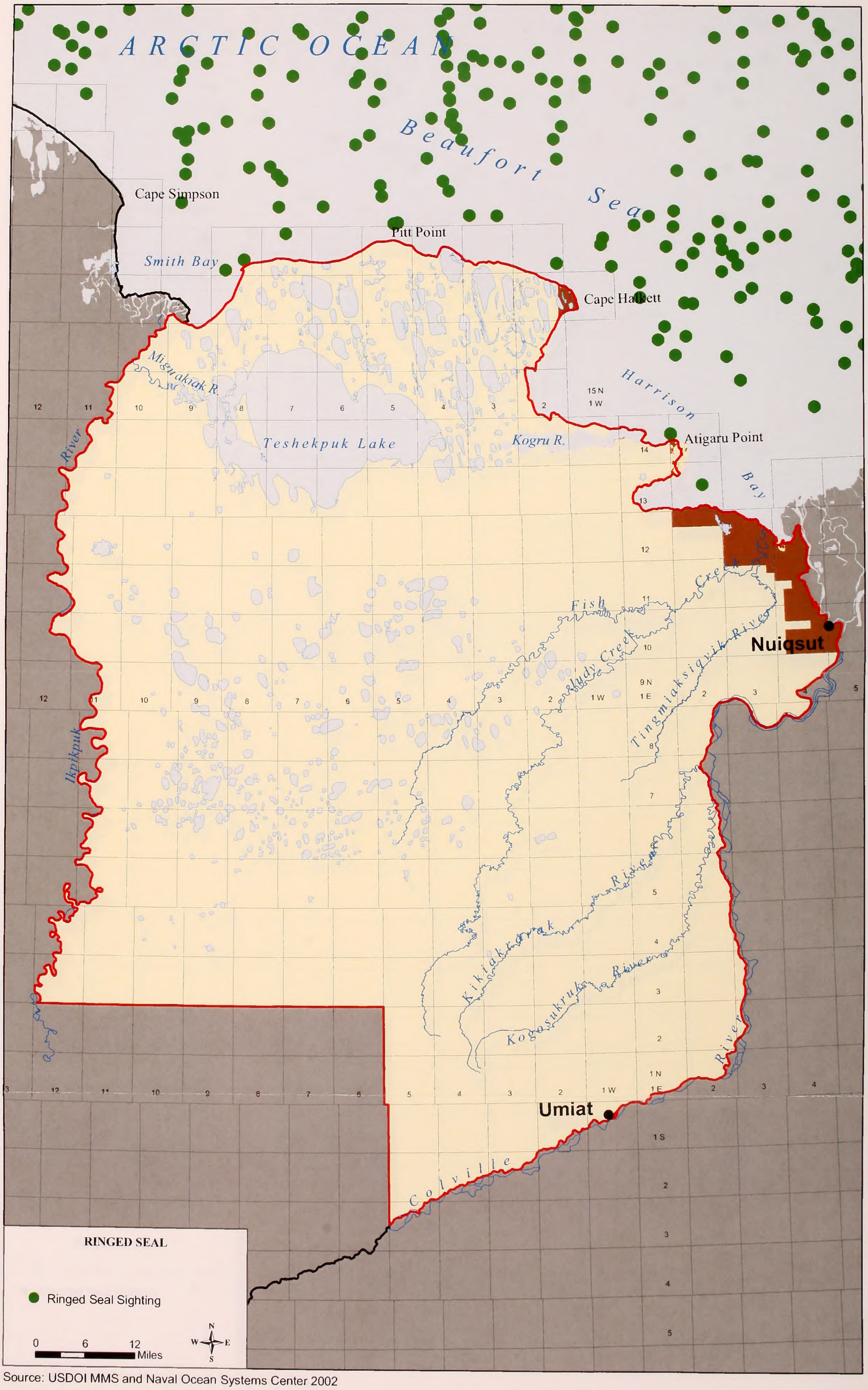
Source: Alaska Department of Fish & Game, North Slope Borough, USDOI - BLM and ABR Inc. - Environmental Research and Services

Map 3-25. Teshekpuk Lake Caribou Herd Mosquito Relief Areas in the Northeast National Petroleum Reserve-Alaska (1990 - 2005 Satellite Telemetry Data)



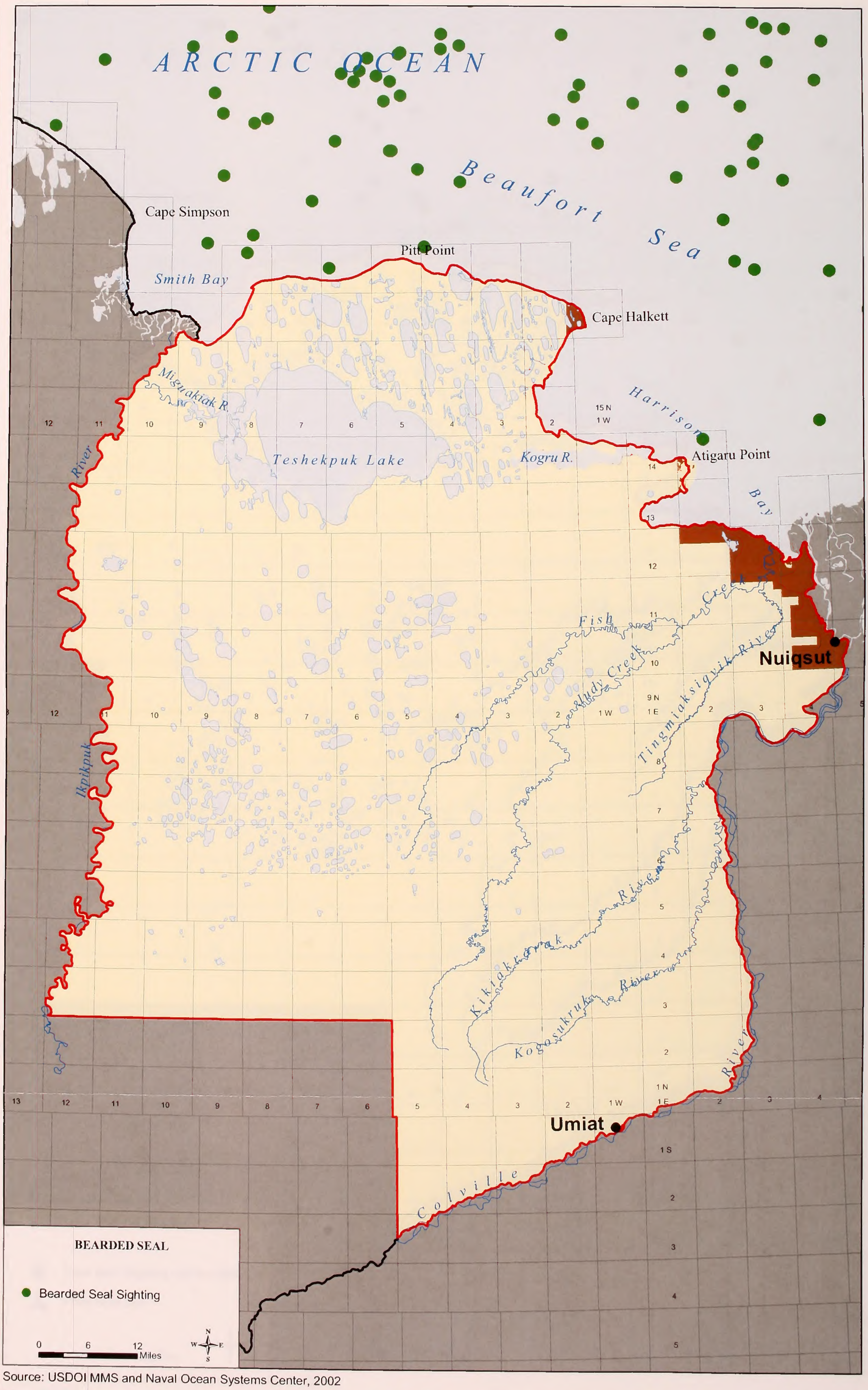
Source: USDOI BLM 1978a, MMS 1998, Bee and Hall 1956, Magoun 1979

Map 3-26. Moose, Muskox, and Wolverine Sightings and Habitat in and near the National Petroleum Reserve-Alaska



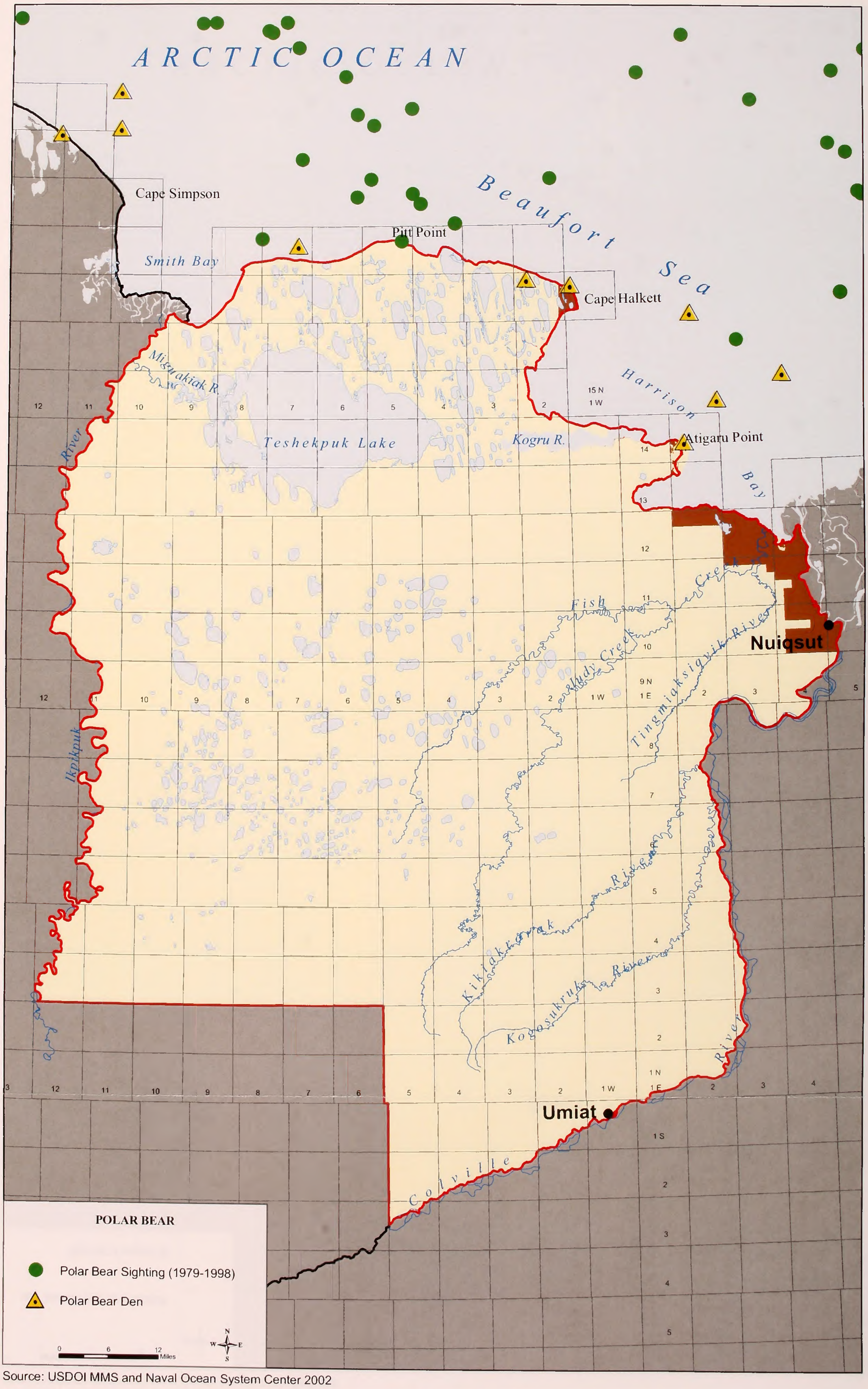
Source: USDOI MMS and Naval Ocean Systems Center 2002

Map 3-27. Ringed Seal Sightings Offshore of the Northeast National Petroleum Reserve-Alaska (1979 - 1999)



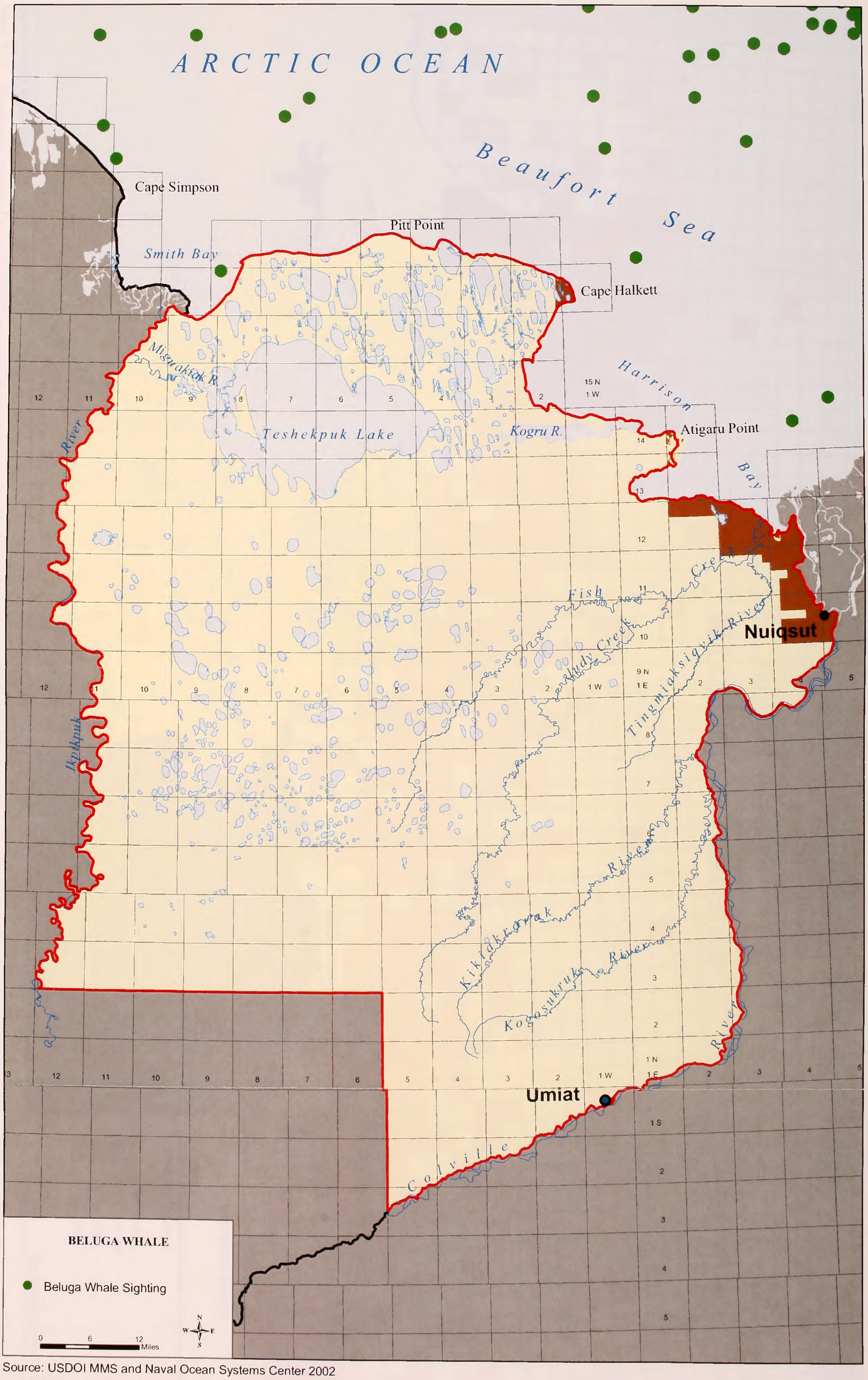
Source: USDOI MMS and Naval Ocean Systems Center, 2002

Map 3-28. Bearded Seal Sightings Offshore of the Northeast National Petroleum Reserve-Alaska (1979 - 1999)



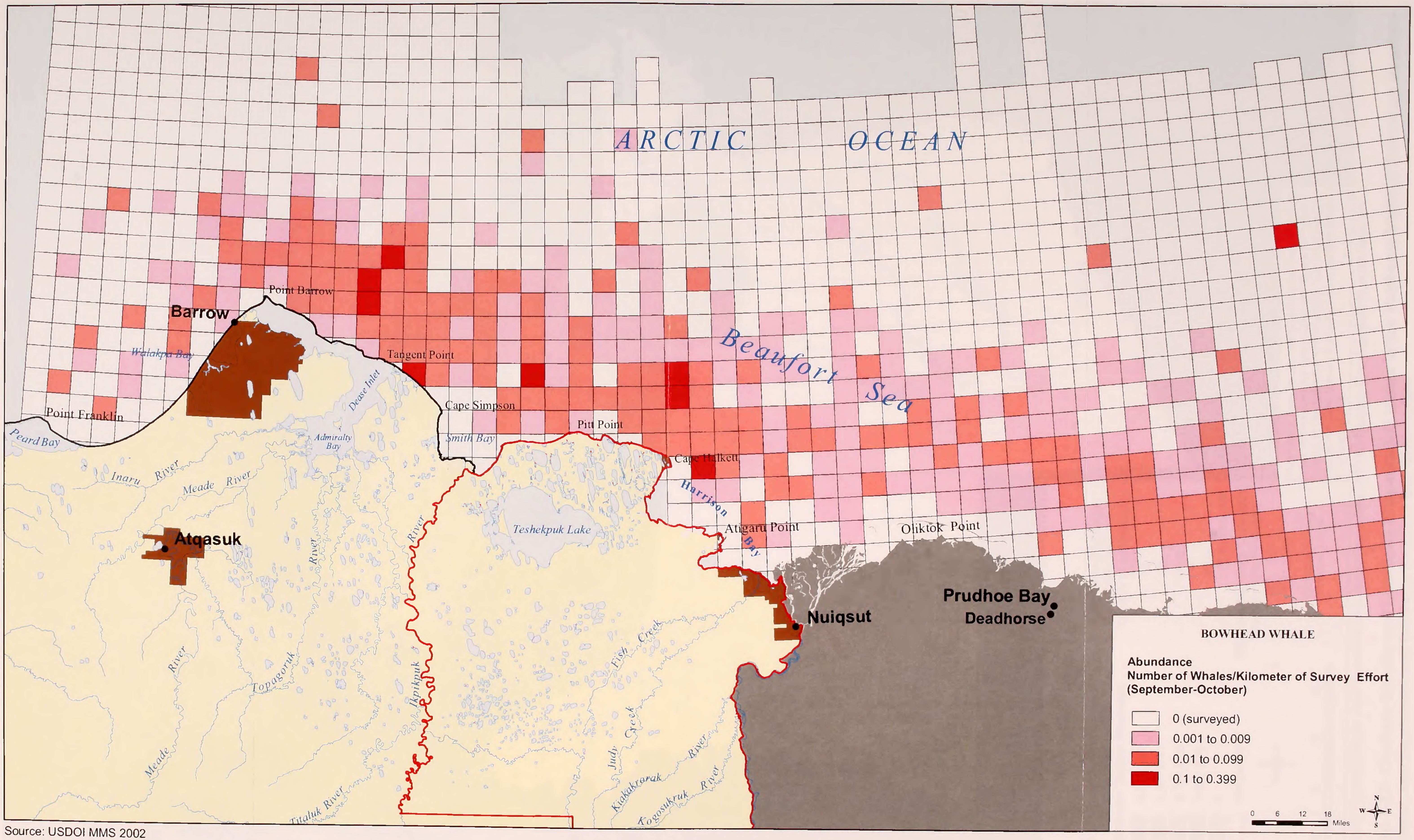
Source: USDOI MMS and Naval Ocean System Center 2002

Map 3-29. Polar Bear Den Sites and Sightings in and near the Northeast National Petroleum Reserve-Alaska



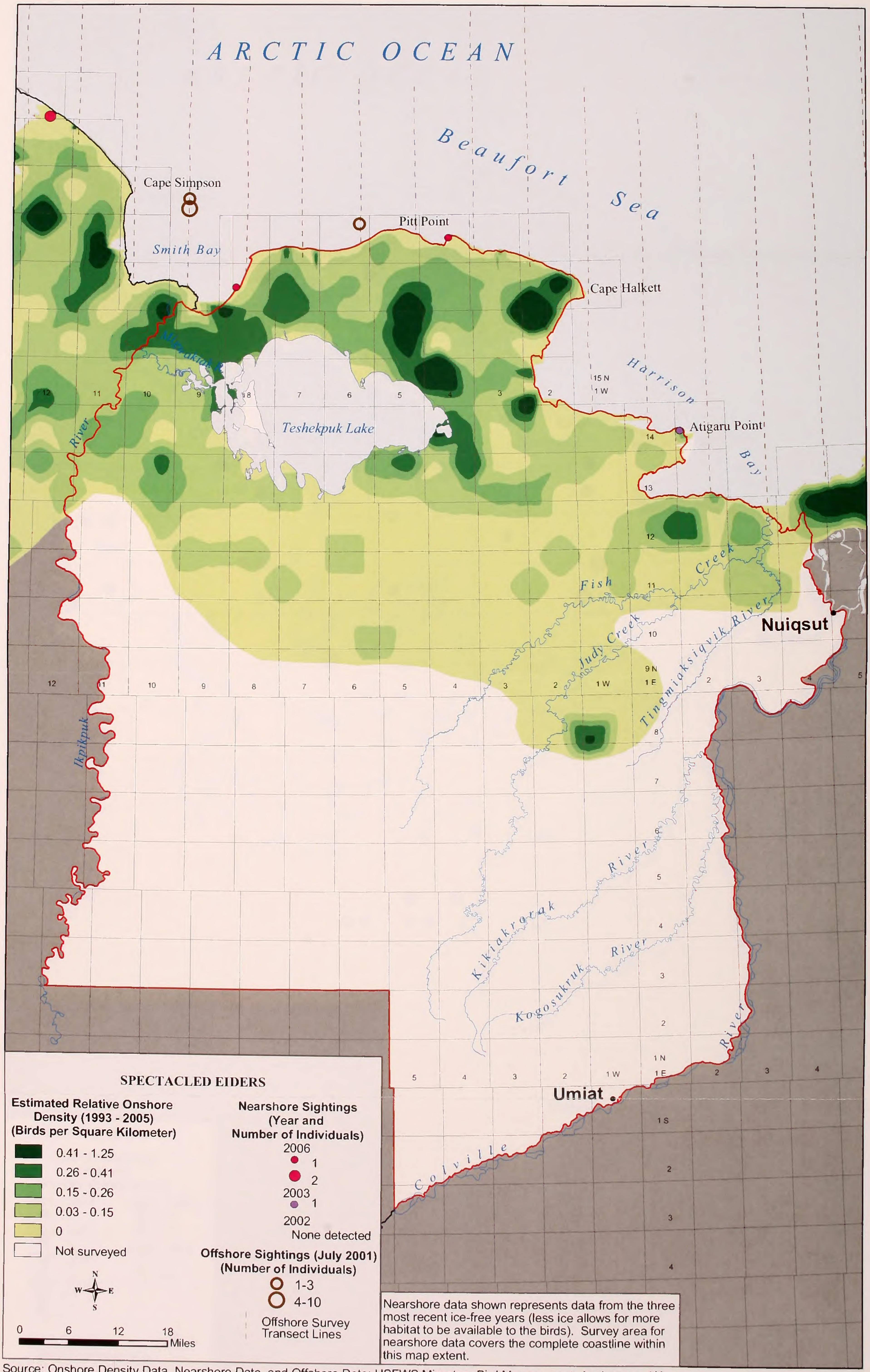
Source: USDOI MMS and Naval Ocean Systems Center 2002

Map 3-30. Beluga Whale Sightings Offshore of the Northeast National Petroleum Reserve-Alaska (1987 - 1999)



Source: USDOI MMS 2002

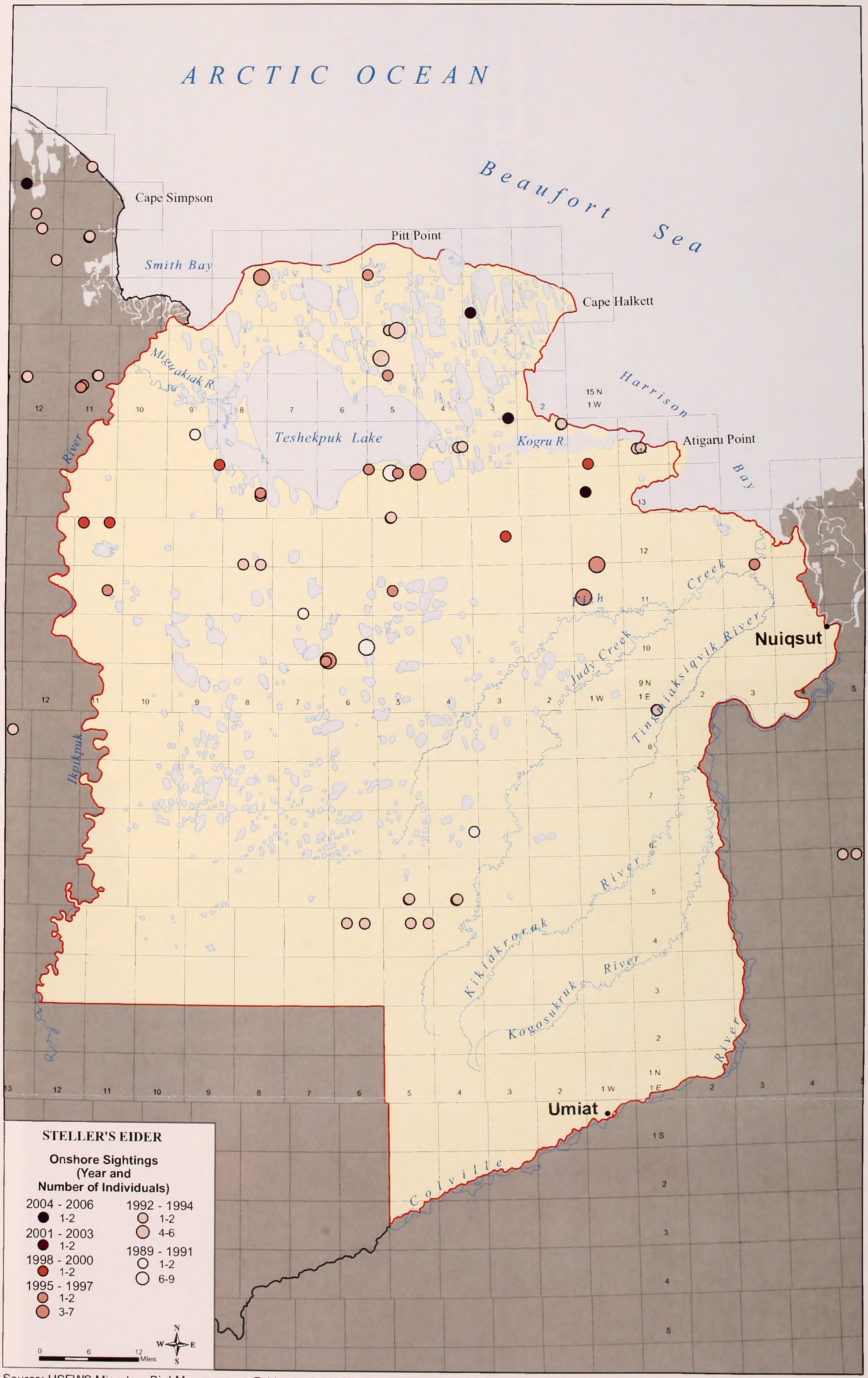
Map 3-31. Bowhead Whale Density Offshore and Nearshore in the National Petroleum Reserve-Alaska



Nearshore data shown represents data from the three most recent ice-free years (less ice allows for more habitat to be available to the birds). Survey area for nearshore data covers the complete coastline within this map extent.

Source: Onshore Density Data, Nearshore Data, and Offshore Data: USFWS Migratory Bird Management, Anchorage, AK

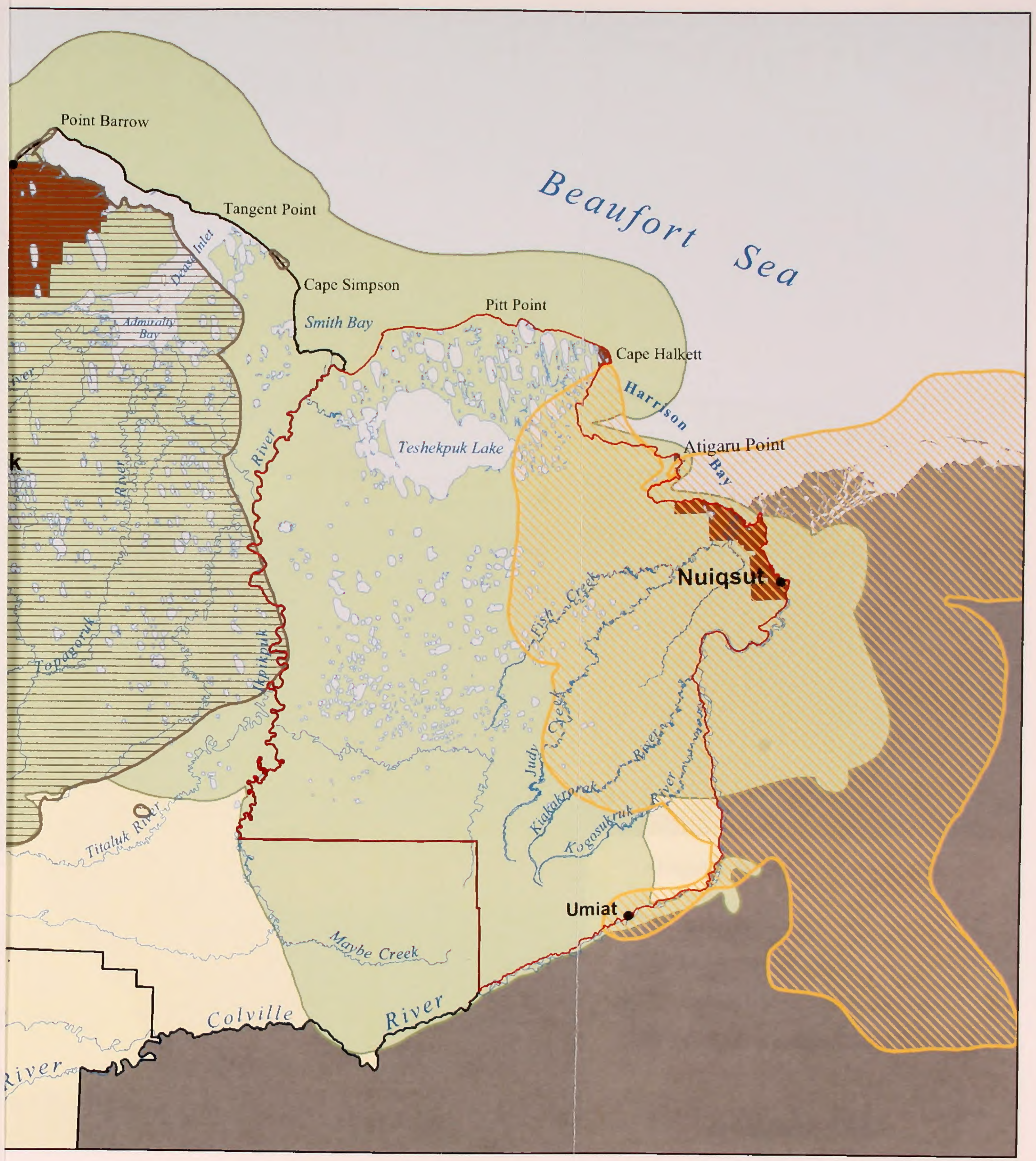
Map 3-32. Onshore Density and Locations of Spectacled Eiders in the Northeast National Petroleum Reserve-Alaska; and Nearshore and Offshore Beaufort Sea Distribution



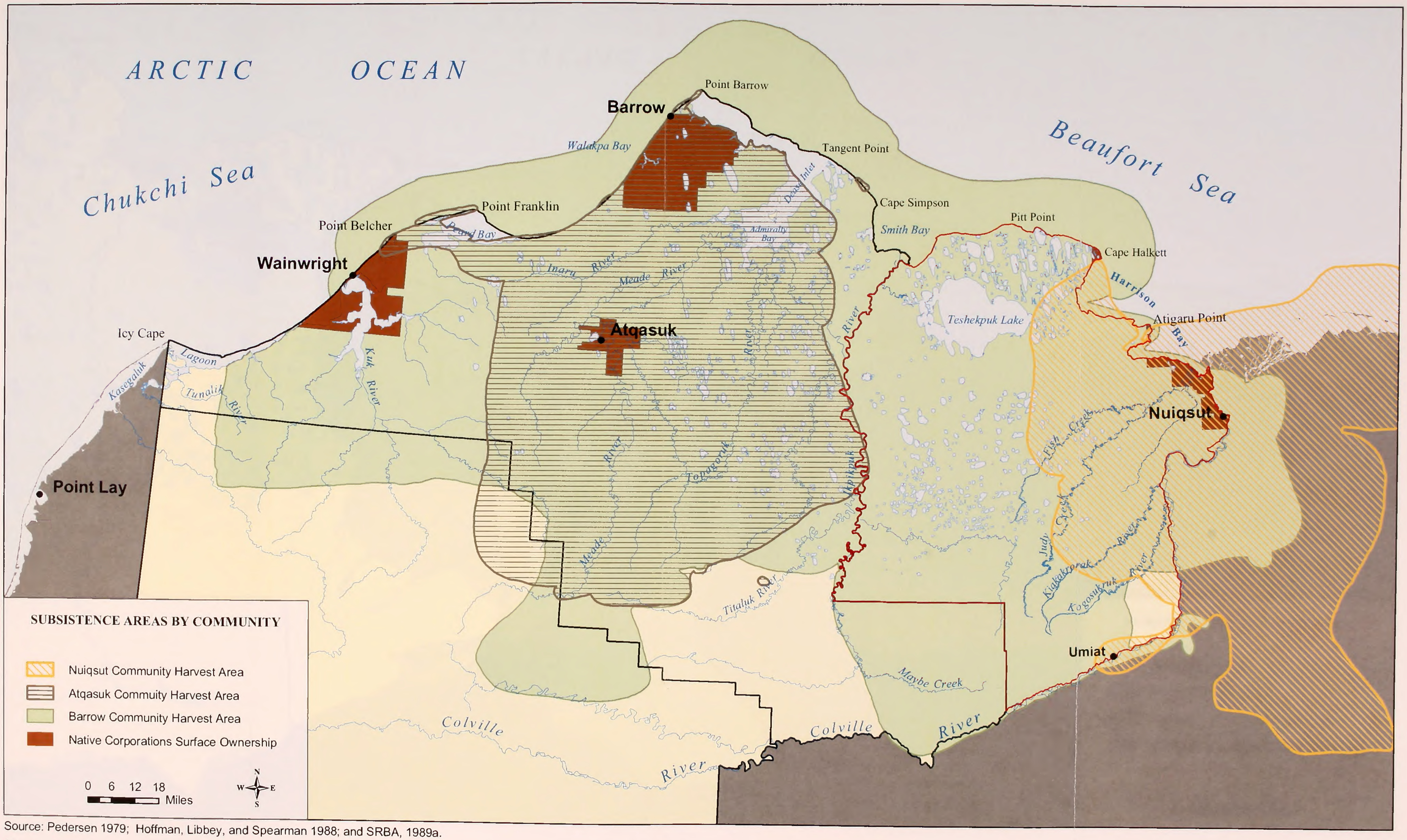
Source: USFWS Migratory Bird Management, Fairbanks, AK; USFWS Migratory Bird Management, Anchorage, AK

Map 3-33. Onshore Sightings of Steller's Eiders in the Northeast National Petroleum Reserve-Alaska

*Map 3-34 of the Draft Supplemental IAP/EIS, "*Cultural Resources in the Northeast National Petroleum Reserve-Alaska*," has been deleted from the Final IAP/EIS.

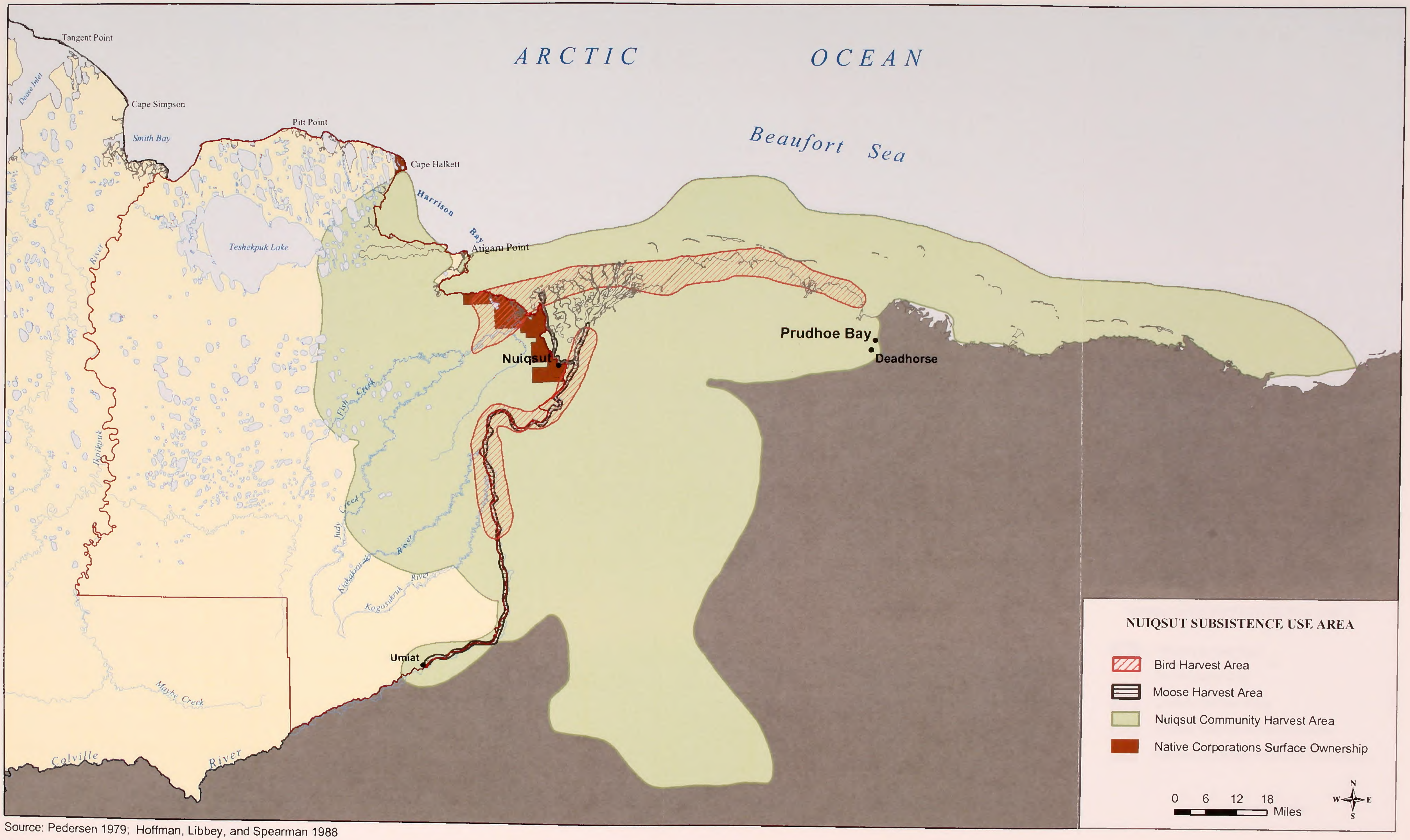


Petroleum Reserve-Alaska



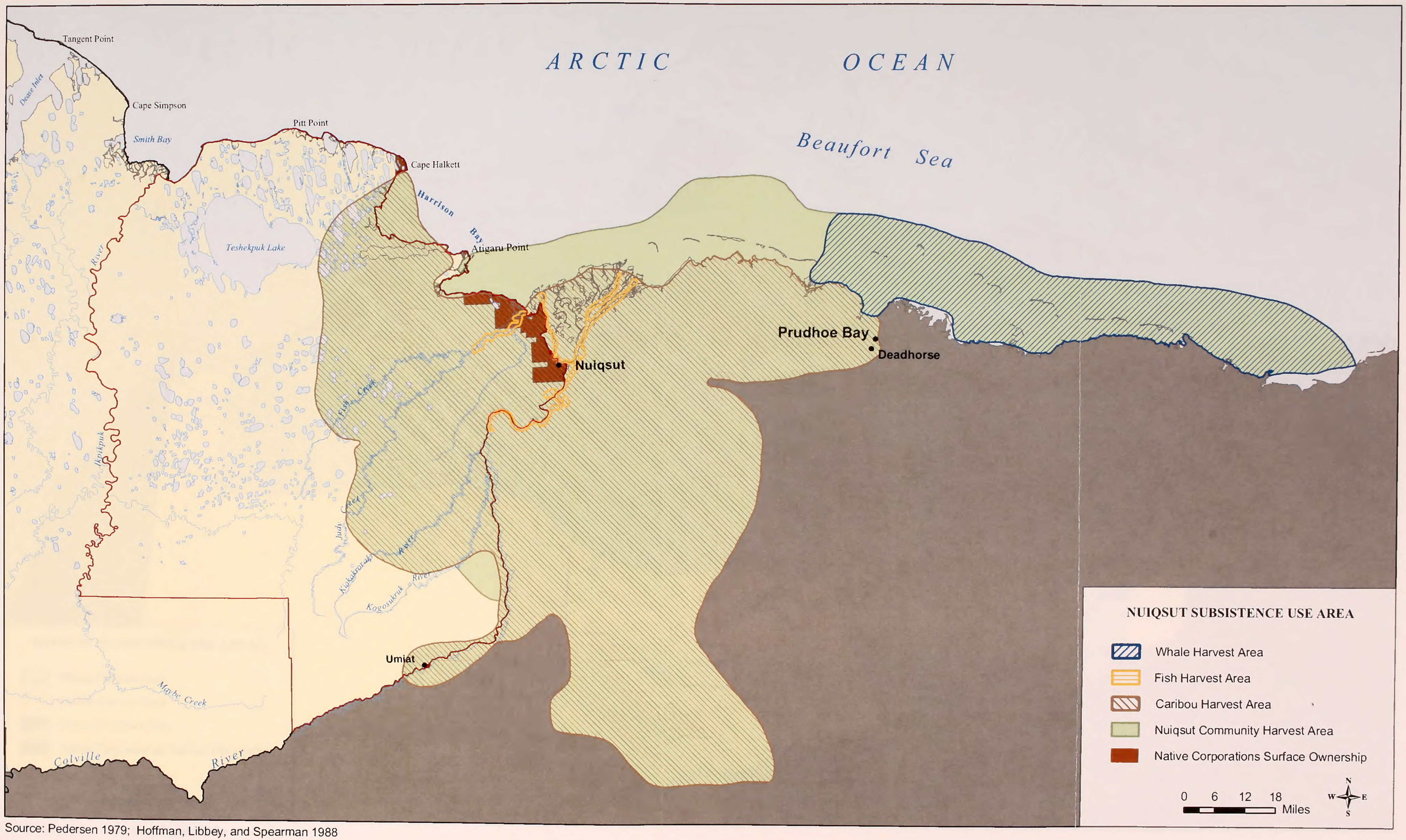
Source: Pedersen 1979; Hoffman, Libbey, and Spearman 1988; and SRBA, 1989a.

Map 3-35. Barrow, Atqasuk, and Nuiqsut Community Subsistence Areas in the National Petroleum Reserve-Alaska



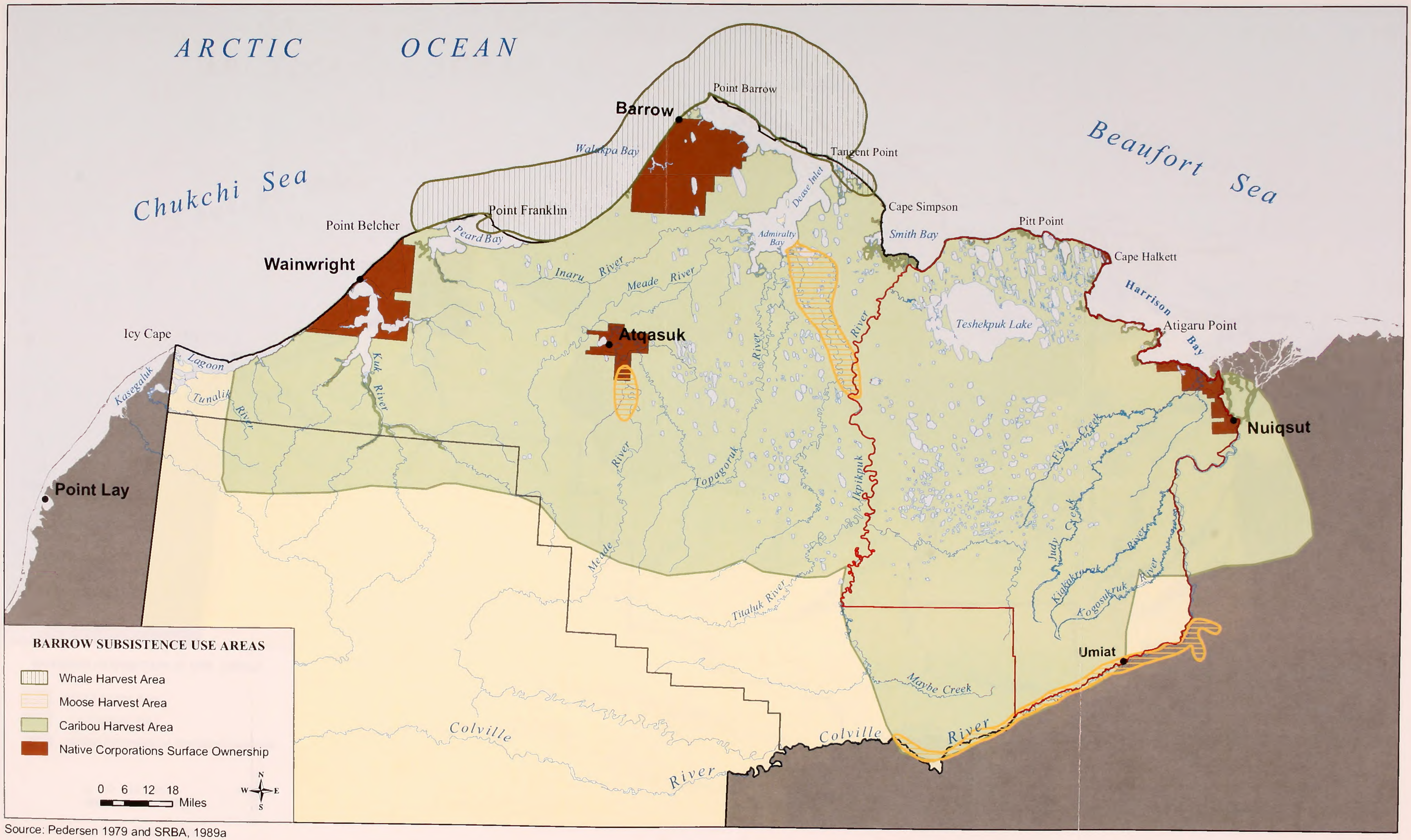
Source: Pedersen 1979; Hoffman, Libbey, and Spearman 1988

Map 3-36. **Nuiqsut Subsistence Use Areas for Moose and Birds in the National Petroleum Reserve-Alaska**



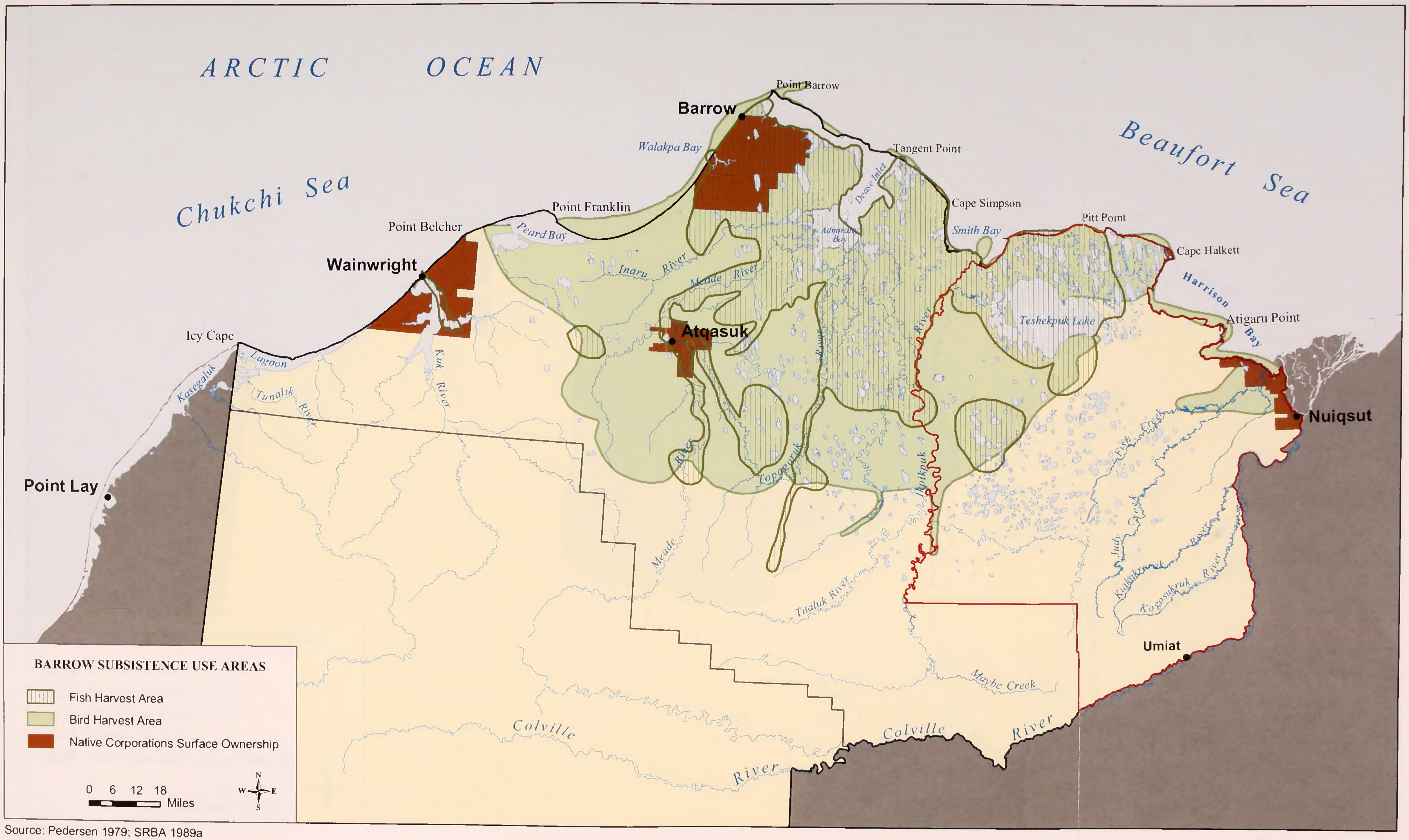
Source: Pedersen 1979; Hoffman, Libbey, and Spearman 1988

Map 3-37. Nuiqsut Subsistence Use Areas for Caribou, Fish, and Whales in the National Petroleum Reserve-Alaska



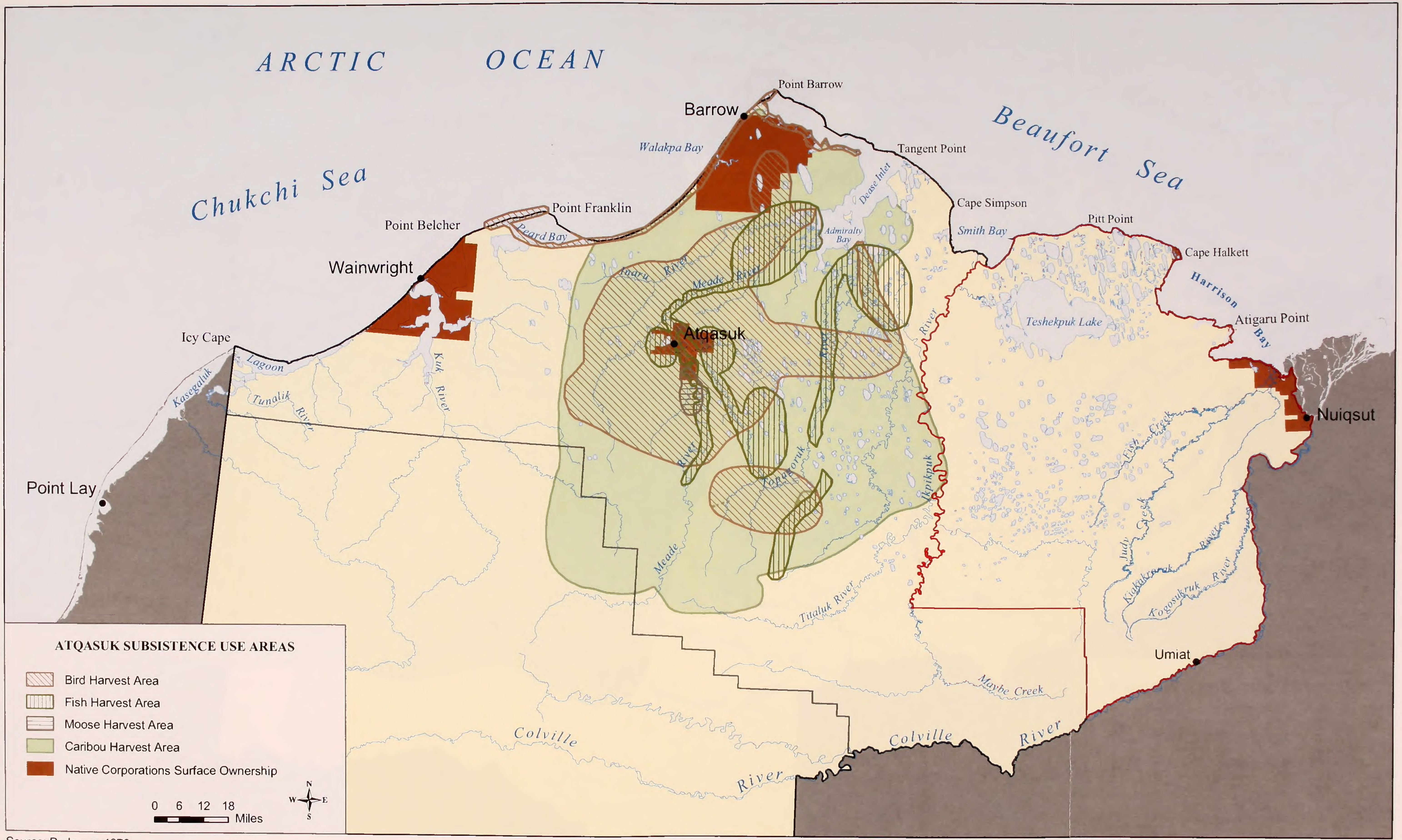
Source: Pedersen 1979 and SRBA, 1989a

Map 3-38. Barrow Subsistence Use Areas for Whale, Moose, and Caribou in the National Petroleum Reserve-Alaska



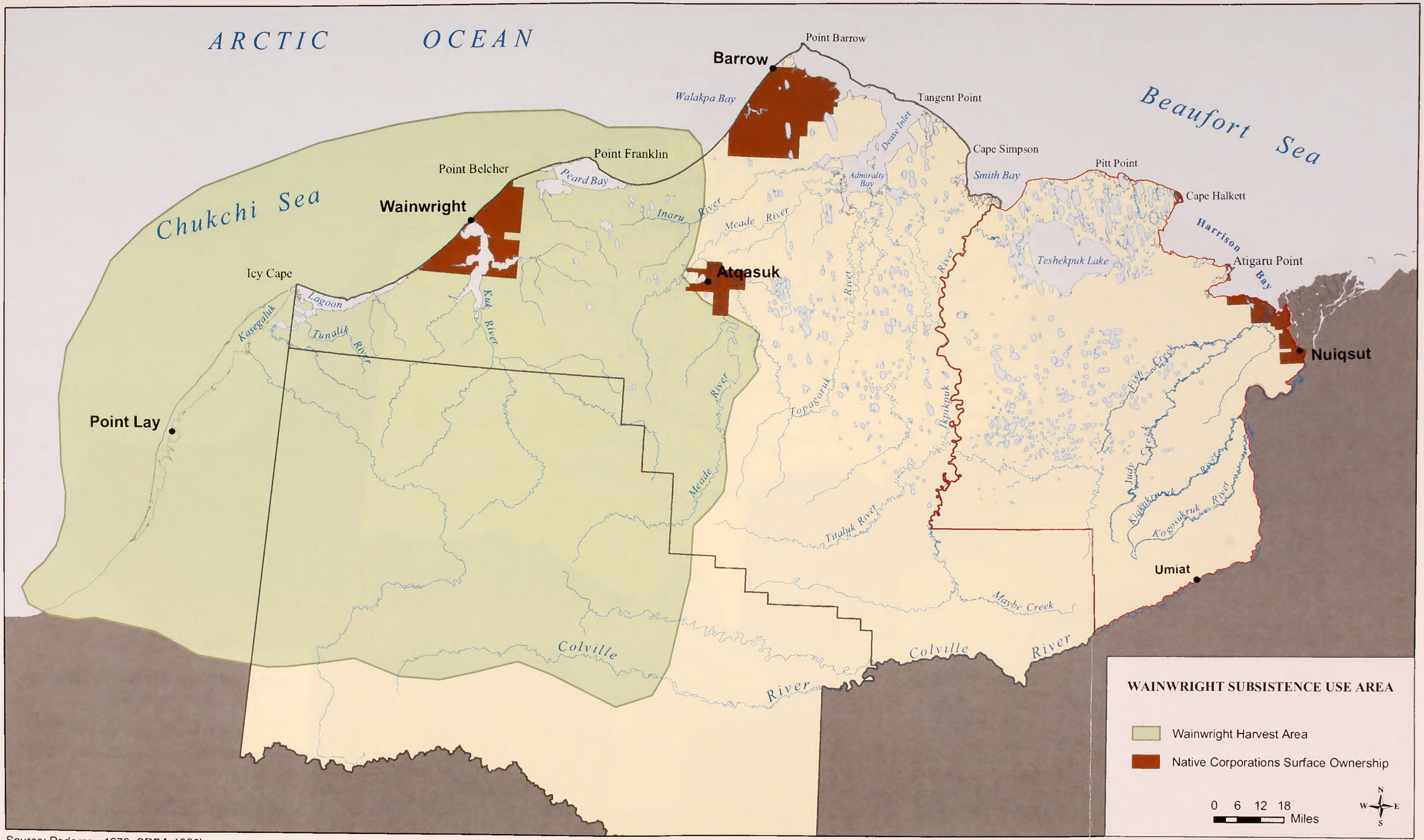
Source: Pedersen 1979; SRBA 1989a

Map 3-39. Barrow Subsistence Use Areas for Fish and Birds in the National Petroleum Reserve-Alaska



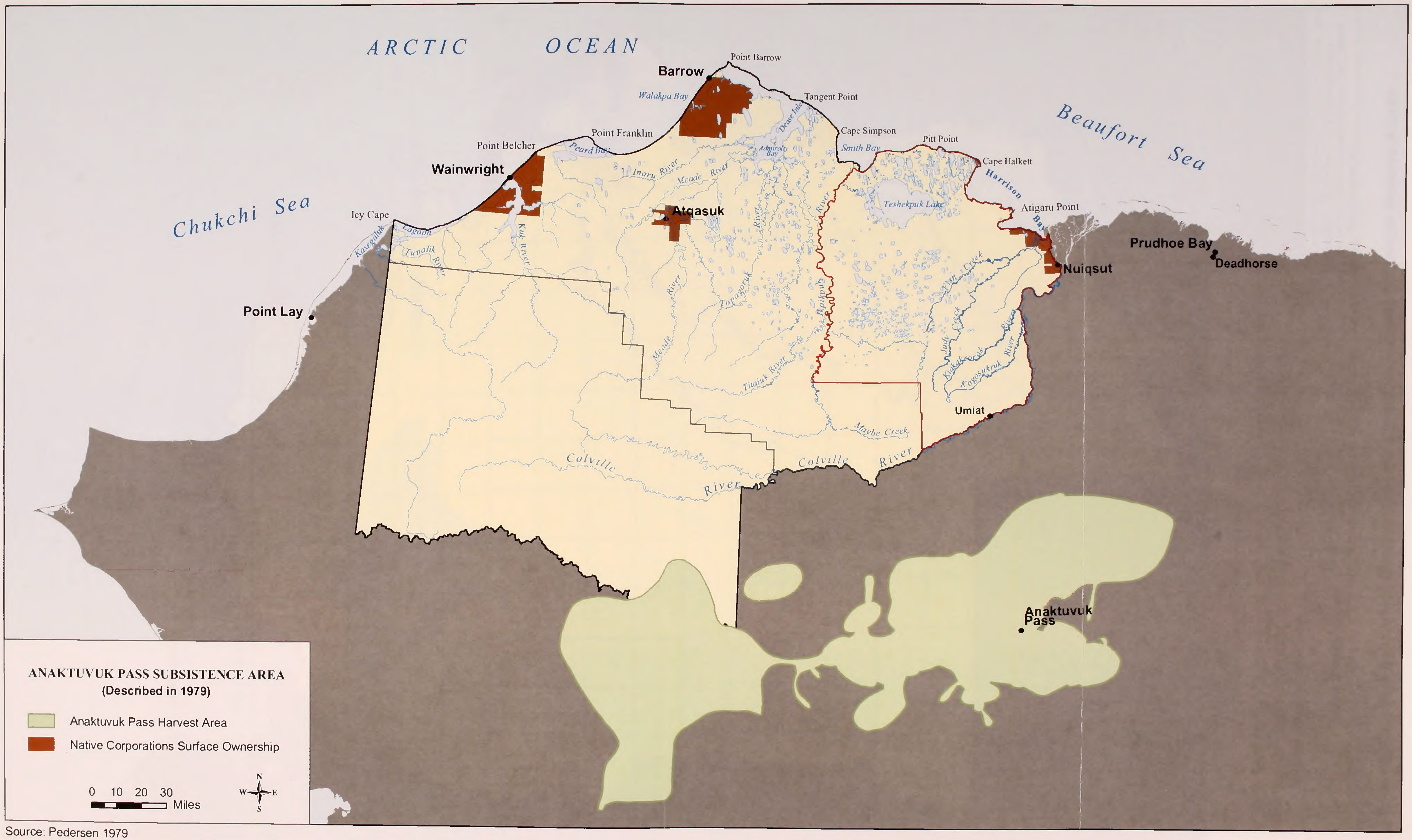
Source: Pederson 1979

Map 3-40. Atqasuk Subsistence Use Areas for Caribou, Moose, Fish, and Birds in the National Petroleum Reserve-Alaska



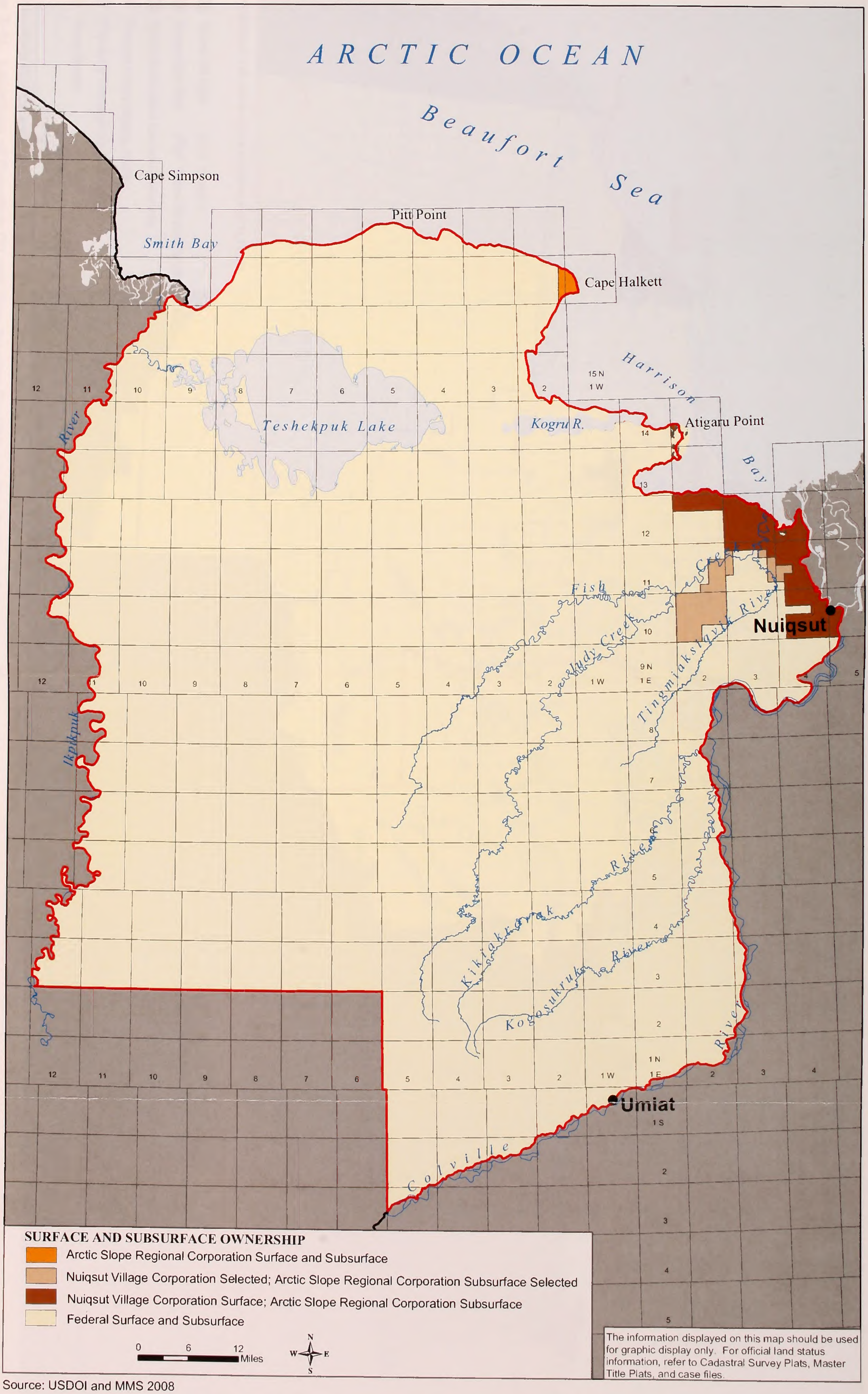
Source: Pedersen 1979; SRBA 1989b

Map 3-41. Wainwright Subsistence Use Area in the National Petroleum Reserve-Alaska



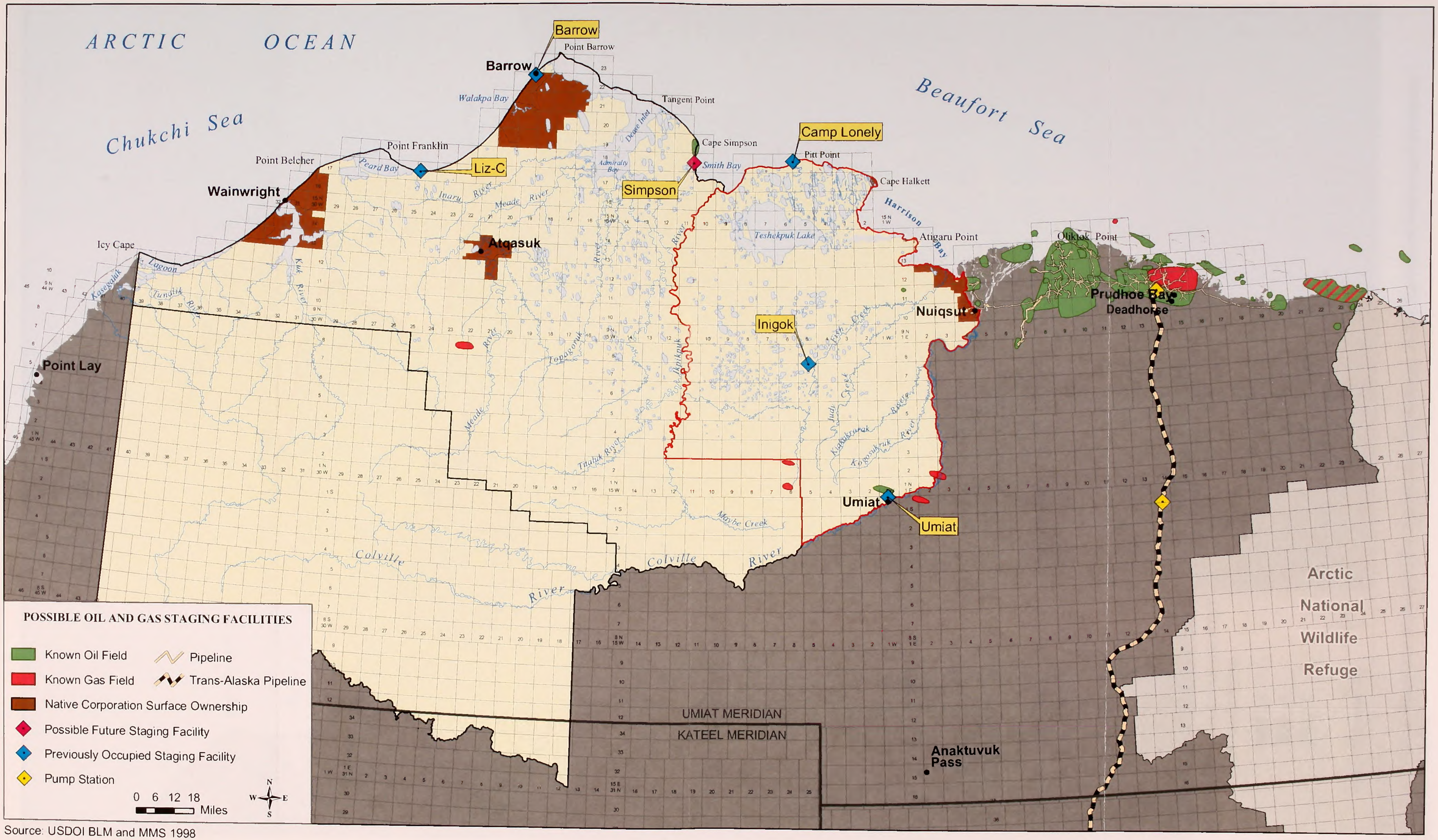
Source: Pedersen 1979

Map 3-42. Anaktuvuk Pass Subsistence Use Area in and near the National Petroleum Reserve-Alaska


ARCTIC OCEAN
Beaufort Sea
Cape Simpson
Smith Bay
Pitt Point
Cape Halkett
Harrison Bay
Atigaru Point
Teshekpuk Lake
Kogru R.
Fish Creek
Judy Creek
Tingmiaksiqvik River
Nuiqsut
Ikpikpuk River
Kikiakrorak River
Kogosukruk River
Colville River
Umiat
15 N
1 W
9 N
1 E
1 N
1 E
1 W
1 S
SURFACE AND SUBSURFACE OWNERSHIP
Arctic Slope Regional Corporation Surface and Subsurface
Nuiqsut Village Corporation Selected; Arctic Slope Regional Corporation Subsurface Selected
Nuiqsut Village Corporation Surface; Arctic Slope Regional Corporation Subsurface
Federal Surface and Subsurface
0
6
12
Miles
N
S
E
W
The information displayed on this map should be used for graphic display only. For official land status information, refer to Cadastral Survey Plats, Master Title Plats, and case files.

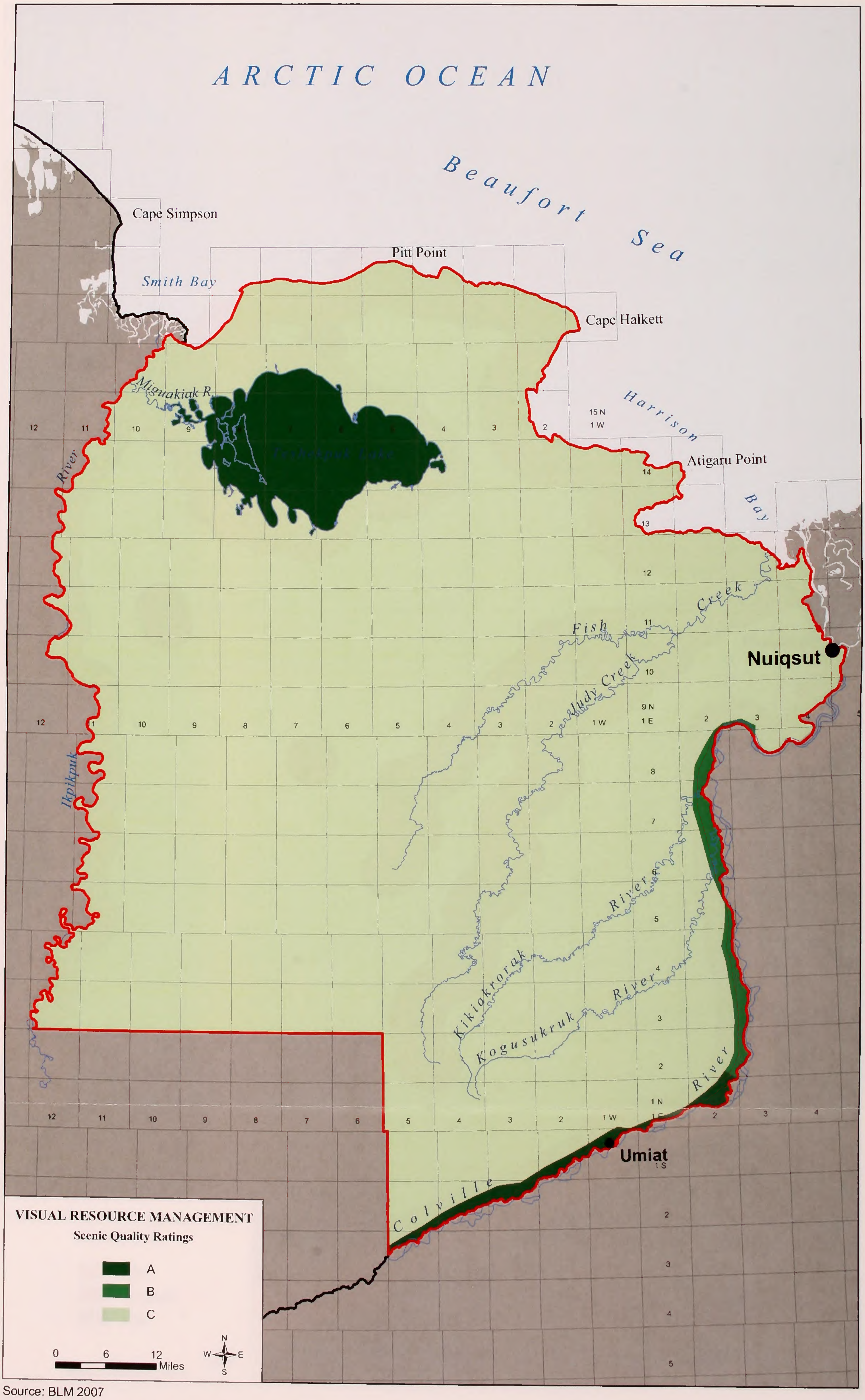
Source: USDOI and MMS 2008

Map 3-43. Surface and Subsurface Ownership in the Northeast National Petroleum Reserve-Alaska



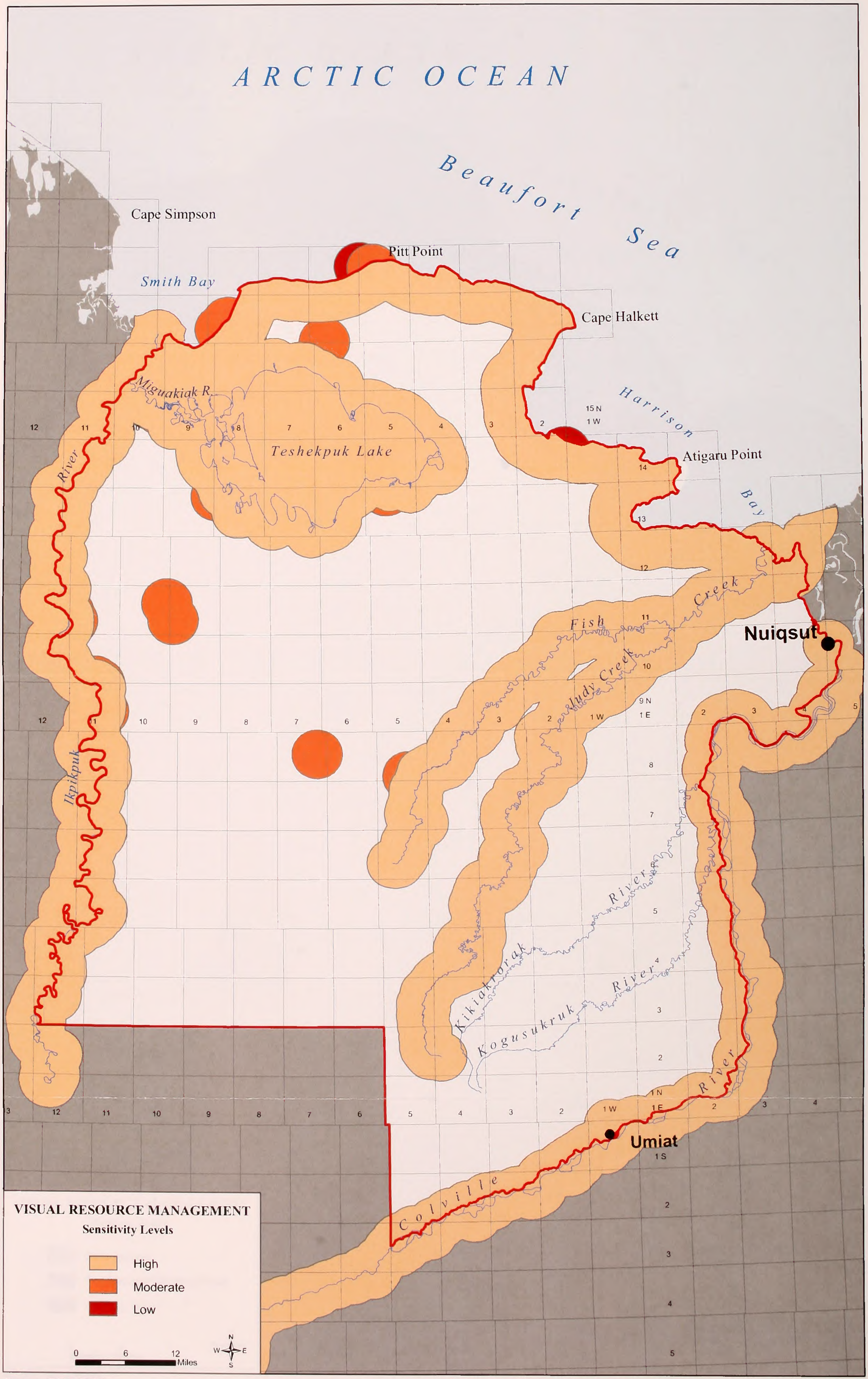
Source: USDOI BLM and MMS 1998

Map 3-44. Locations of Possible Oil and Gas Staging Facilities in the National Petroleum Reserve-Alaska



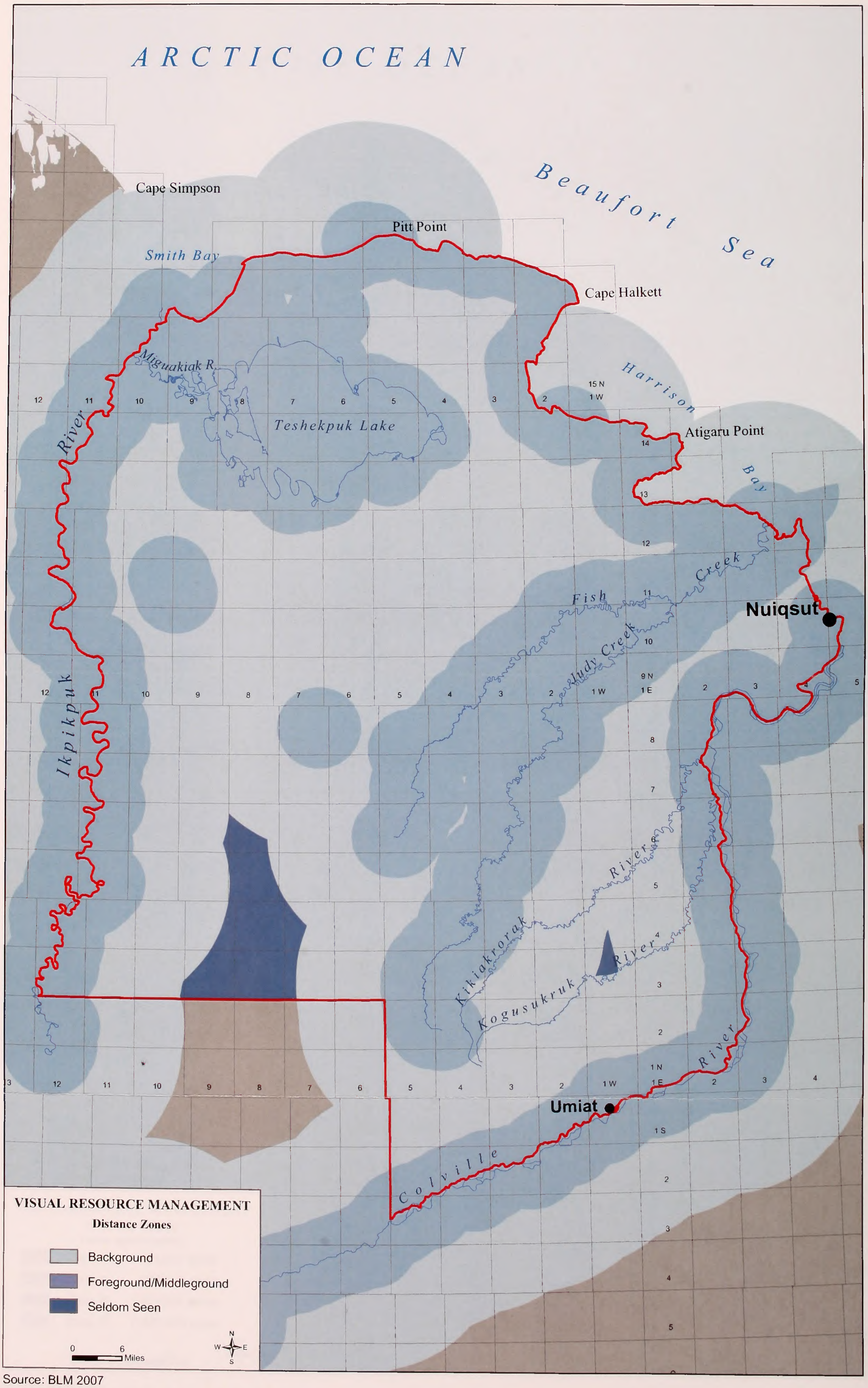
Source: BLM 2007

Map 3-45. Visual Resource Management Scenic Quality Ratings in the Northeast National Petroleum Reserve - Alaska



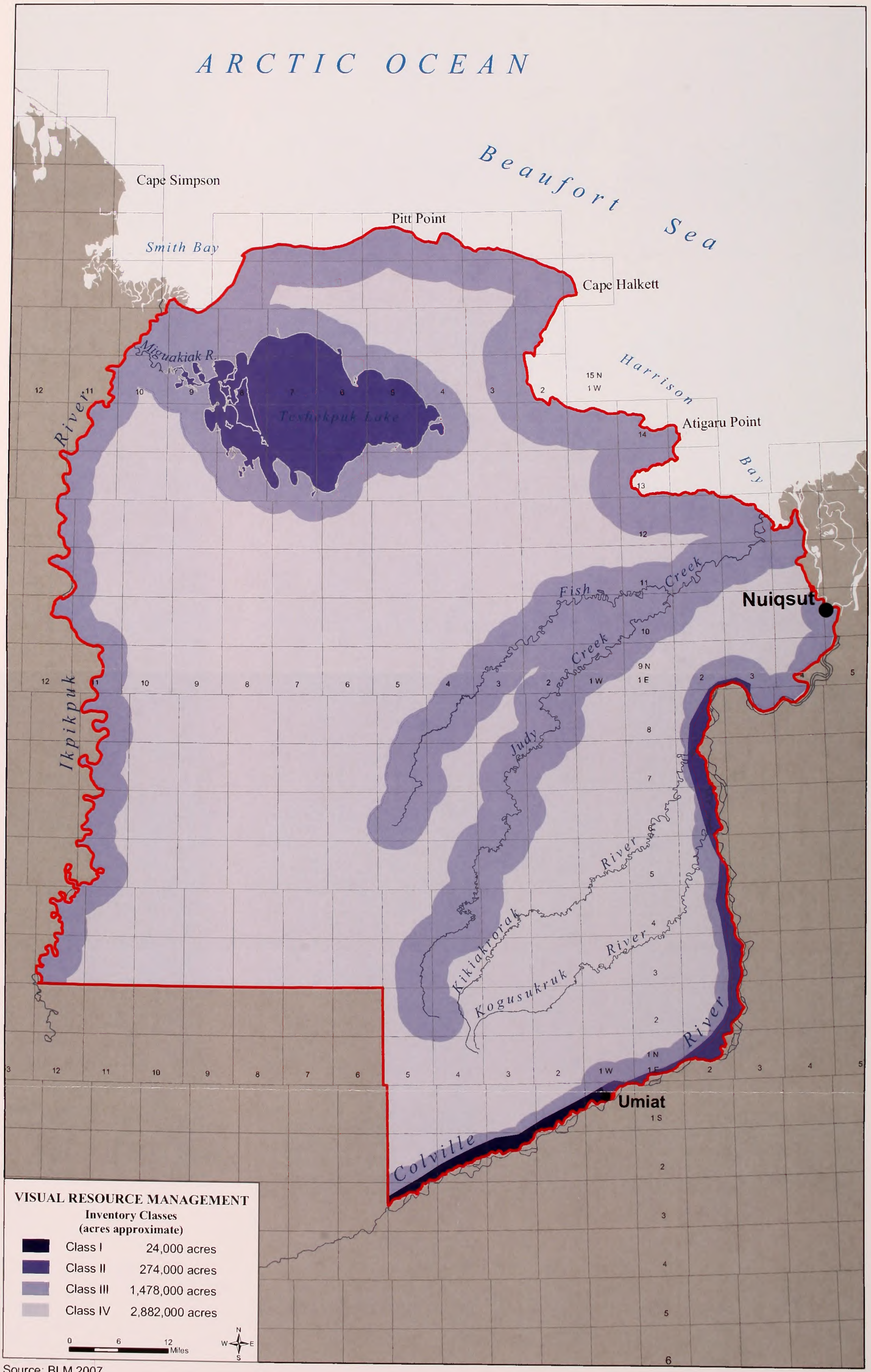
Source: BLM 2007

Map 3-46. Visual Resource Management Sensitivity Levels in the Northeast National Petroleum Reserve - Alaska



Source: BLM 2007

Map 3-47. Visual Resource Management Distance Zones in the Northeast National Petroleum Reserve - Alaska



Source: BLM 2007

Map 3-48. Visual Resource Management Inventory Classes in the Northeast National Petroleum Reserve - Alaska